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# Section 1

# General Information

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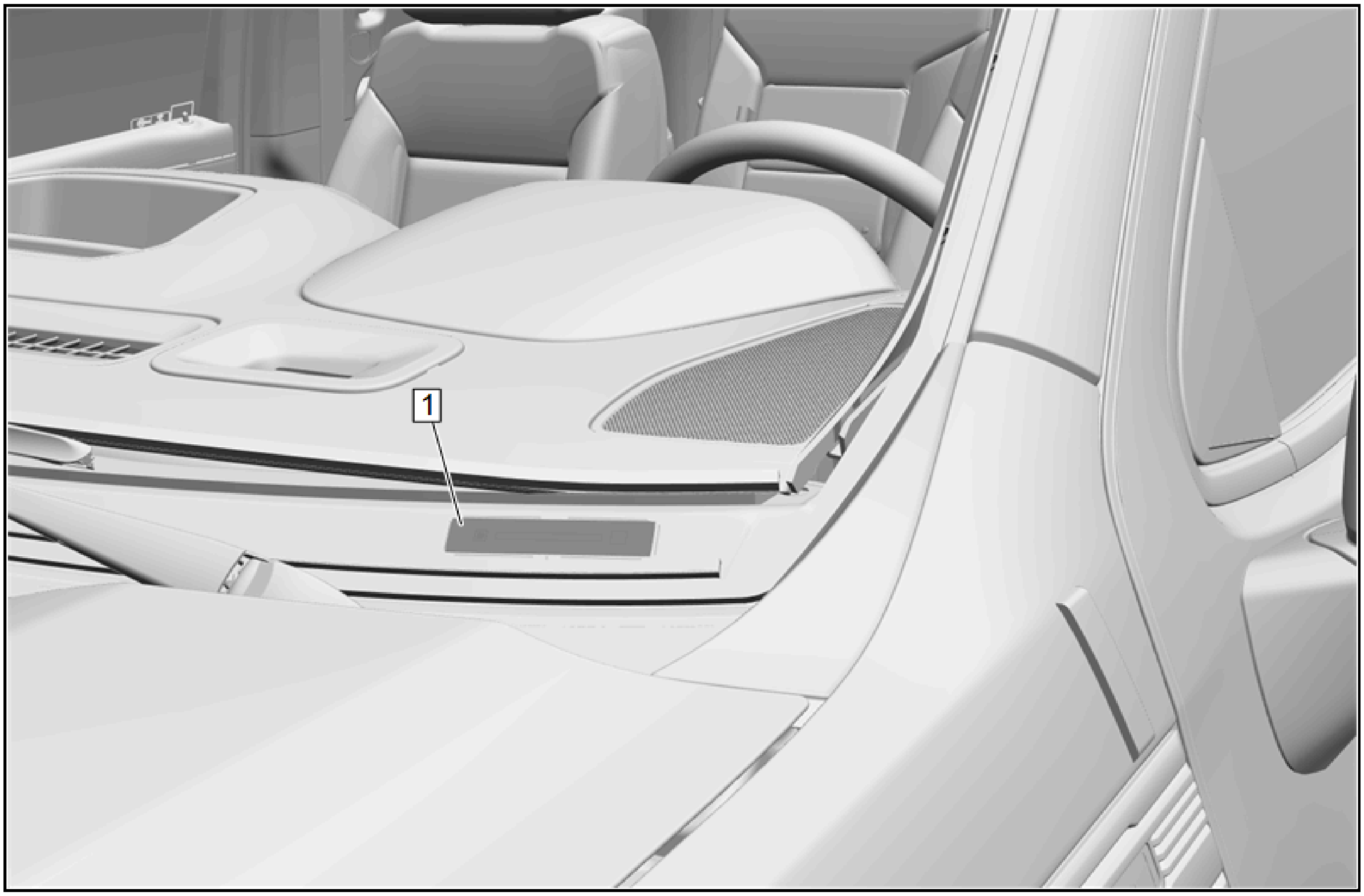
# General Information

## Introduction

### Vehicle, Engine and Transmission ID and VIN Location, Derivative and Usage



The vehicle identification number (VIN) plate (1) is the legal identifier of the vehicle. The VIN plate is located on the upper left corner of the instrument panel. The VIN number can be seen through the windshield from the outside of the vehicle:

**Vehicle Identification Number (VIN) System**

| Position | Definition | Character | Description |
|---|---|---|---|
| 1 | Country of Origin | 1 | United States |
| | | 3 | Mexico |
| 2 | Manufacturer | G | General Motors |
| 3 | Vehicle Brand/Type | T | GMC Truck |
| | | D | GMC Incomplete |
| 4 | GVWR/Brake System/Body Style | N | 6,001–7,000 lbs/Hydraulic/Standard Cab |
| | | P | 6,001–7,000 lbs/Hydraulic/Crew Cab |
| | | R | 6,001–7,000 lbs/Hydraulic/Extended Cab |
| | | U | 7,001–8,000 lbs/Hydraulic/Crew Cab |
| | | V | 7,001–8,000 lbs/Hydraulic/Extended Cab |

## Vehicle Identification Number (VIN) System (cont'd)

| Position | Definition | Character | Description |
|---|---|---|---|
| 5/6 | Line Chassis/Series | 8/A | GMC Sierra 1500, Fleet/Base 2WD |
| | | 8/B | GMC Sierra 1500, SLE 2WD |
| | | 8/C | GMC Sierra 1500, Elevation 2WD |
| | | 8/D | GMC Sierra 1500, SLT 2WD |
| | | 8/F | GMC Sierra 1500, Denali 2WD |
| | | 8/9 | GMC Sierra 2WD, (Non-US, Non-Canada) |
| | | 9/A | GMC Sierra 1500, Fleet/Base 4WD |
| | | 9/B | GMC Sierra 1500, SLE 4WD |
| | | 9/C | GMC Sierra 1500, Elevation 4WD |
| | | 9/D | GMC Sierra 1500, SLT 4WD |
| | | 9/E | GMC Sierra 1500, AT4 4WD |
| | | 9/F | GMC Sierra 1500, Denali 4WD |
| | | 9/9 | GMC Sierra 4WD, (Non-US, Non-Canada) |
| 7 | Restraint System | E | RPO AY0 – Active Manual Belts, Airbags – Driver and Passenger – Front (1st row), Front Seat Side (1st row), Roof Side (all seating rows) |
| 8 | Engine Type | D | RPO L84, Engine Gas, 8 Cylinder, 5.3L, DI, DFM, Aluminum, GEN 5, VAR 2 |
| | | F | RPO L82, Engine Gas, 8 Cylinder, 5.3L, DI, AFM, Aluminum, GEN 5, VAR 1 |
| | | H | RPO LV3. Engine Gas, 6 Cylinder, 4.3L, GEN 5, SIDI, V6, VVT, OHV, E85 MAX, Aluminum |
| | | K | RPO L3B, Engine Gas, 4 Cylinder, L4, 2.7L, SIDI VVT, Turbo, DOHC, Aluminum |
| | | L | RPO L87, Engine Gas, 8 Cylinder, V8, 6.2L, DI AFM, Aluminum, GEN 5 |
| | | T | RPO LM2, Engine Diesel, 6 Cylinder, 3.0L, CRI, V6, DOHC, Turbo, VGT, Aluminum |
| 9 | Check Digit | — | Check Digit |
| 10 | Model Year | K | 2019 |
| 11 | Plant Location | Z | Fort Wayne, Indiana, USA |
| | | G | Silao, Mexico |
| 12–17 | Plant Sequence Number | — | Plant Sequence Number |

### 2.7L (L3B) Engine ID and VIN Derivative Location

Engine Identification

### 3.0L (LM2) Diesel Engine ID and VIN Derivative Location

Engine Identification

### 4.3L (LV3) Engine ID and VIN Derivative Location

Engine Identification

### 5.3L (L82 L84) or 6.2L (L87) Engine ID and VIN Derivative Location

Engine Identification

### 10L80 (MQB) Transmission ID and VIN Derivative Location

Transmission Identification Information

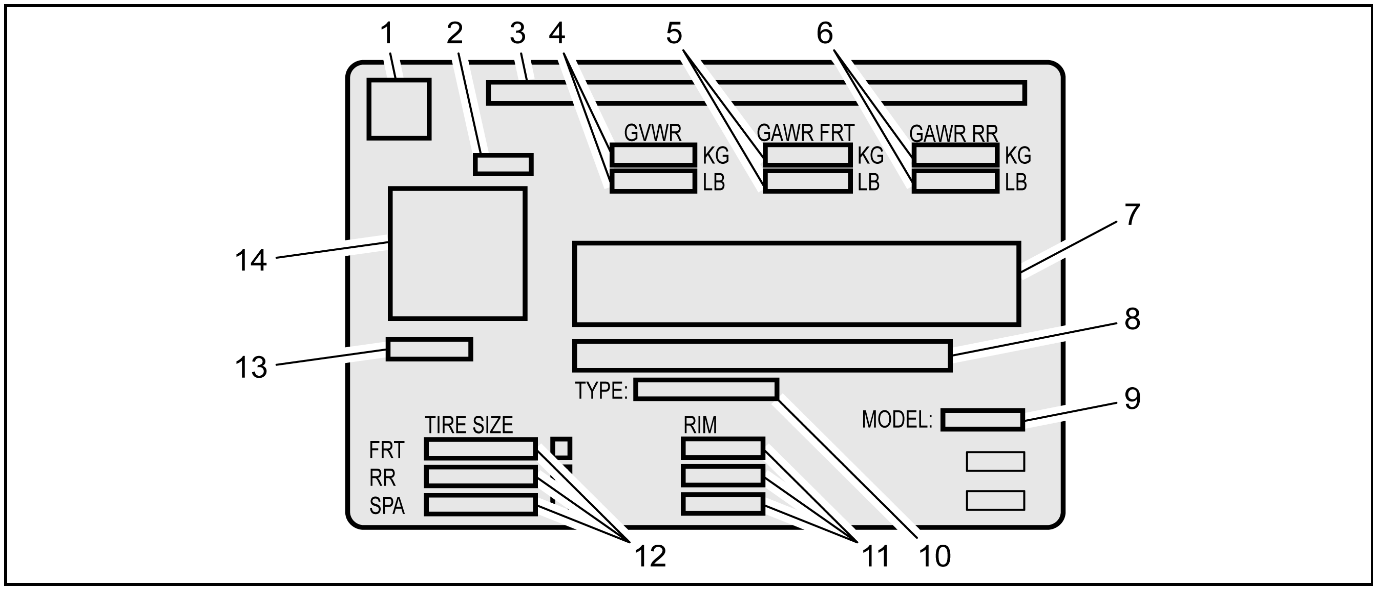
### 6L80 (MYC) Transmission ID and VIN Derivative Location

Transmission Identification Information

### 8L90 (MQE) Transmission ID and VIN Derivative Location

Transmission Identification Information

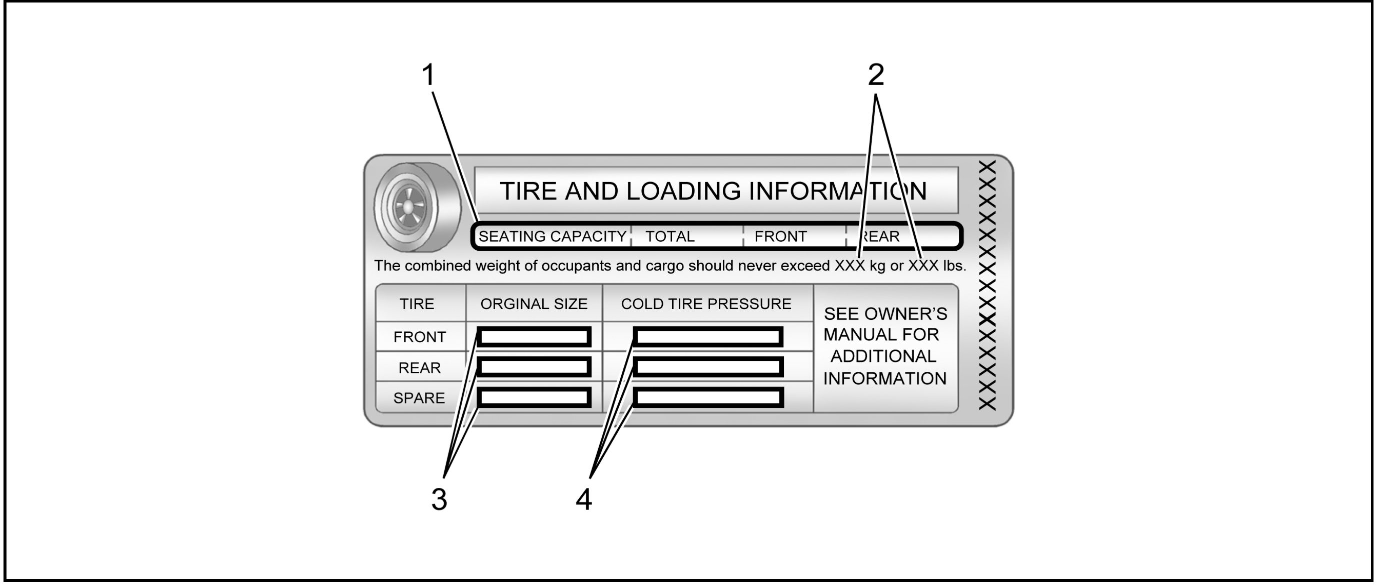
# Vehicle Certification, Tire Placard, and Anti-Theft Label



4992823

## Vehicle Certification Label

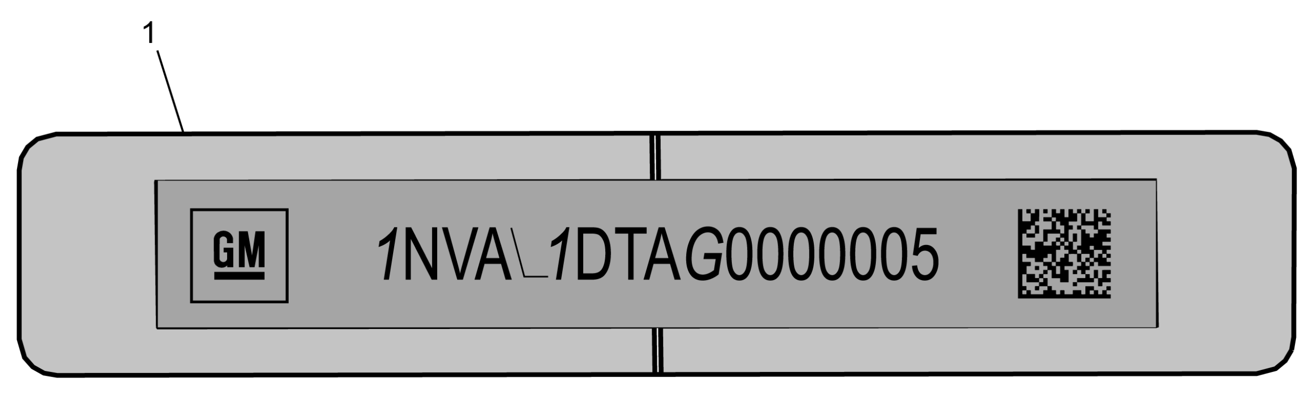
| Callout | Description |
|---|---|
| A vehicle-specific Certification label is attached to the vehicle's center pillar (B-pillar) and displays the following assessments: | |
| 1 | Logo |
| 2 | Final Date of Manufacture (Month and Year MM/YY)<br>Date of manufacture is to reflect the date that the vehicle is counted as built. In those cases where a replacement label is needed, the replacement label should reflect the actual build date not the date of replacement. |
| 3 | Name of Manufacturer |
| 4 | Maximum Gross Vehicle Weight Rating (GVWR) |
| 5 | Maximum Gross Axle Weight Rating (GAWR) - Front |
| 6 | Maximum Gross Axle Weight Rating (GAWR) - Rear |
| 7 | Certification Statement |
| 8 | Vehicle Identification Number (VIN) |
| 9 | Engineering Model Number |
| 10 | Vehicle Class Type (Pass Car, etc.) |
| 11 | Original Equipment Rim Size |
| 12 | Original Equipment Tire Size |
| 13 | Paint Code |
| 14 | QR Code<br>Once the QR code is scanned, the information will appear in this order on your smartphone or laptop: VIN, Model Year, Model, Build Month, Year, Engineering Book, Vehicle Order Number, 3 Digit RPO Codes sorted alphanumerically and the Paint Code (same code appears the lower left of the QR code) |


1
2
TIRE AND LOADING INFORMATION
SEATING CAPACITY
TOTAL
FRONT
REAR
The combined weight of occupants and cargo should never exceed XXX kg or XXX lbs.
TIRE
ORGINAL SIZE
COLD TIRE PRESSURE
FRONT
REAR
SPARE
SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION
XXXXXXXXXXXX
3
4

4962282

## Tire Placard

| Callout | Description |
|---|---|
| A vehicle-specific Tire and Loading Information label is attached to the vehicle's center pillar (B-pillar) and displays the following assessments: | |
| 1 | Specified Occupant Seating Positions |
| 2 | Maximum Vehicle Capacity Weight |
| 3 | Original Equipment Tire Size |
| 4 | Tire Pressure, Front, Rear, and Spare (Cold) |


1
GM
1NVA_1DTAG0000005

4962289

## Anti-Theft Label

| Callout | Description |
|---|---|
| This legal identifier is in the front corner of the instrument panel, on the driver side of the vehicle. It can be seen through the windshield from outside. The Vehicle Identification Number (VIN) also appears on the Vehicle Certification and certificates of title and registration. | |
| 1 | Vehicle Identification Number (VIN) |

## RPO Code List

The following table provides the description of the Regular Production Option (RPO) codes that are available on the vehicle. The vehicle's RPO list is printed on the Service Parts Identification Label.

| RPO | Description |
|---|---|
| 00A | WHEEL SPARE-17 X 8.0, J, STEEL, DESIGN 2 (SEO) |
| 01U | PRIMARY COLOR-EXTERIOR, SPECIAL (02) |
| 1SA | PACKAGE-OPTION 01 |
| 3SA | PACKAGE-SLE OPTION 1 |
| 3SB | PACKAGE-SLE OPTION 2 |
| 4AA | INTERIOR TRIM-JET BLACK |
| 4F2 | INTERIOR TRIM-JET BLACK / KALAHARI |
| 4JJ | INTERIOR TRIM-GIDEON/VY DK ATMOSPHERE |
| 4JR | INTERIOR TRIM-DARK ASH GRAY/VY DK ATMOSPHERE |
| 4SA | PACKAGE-SLT OPTION 1 |
| 4SB | PACKAGE-SLT OPTION 2 |
| 5A7 | WHEEL SPARE-NONE |
| 5AZ | ACCESSORY-SAFETY KIT - UNIVERSAL |
| 5H1 | KEY-SINGLE KEY SYSTEM, 2 SPARE KEYS |
| 5JL | ACCESSORY-BRAKE UPGRADE PKG 1 - COMPLETE |
| 5L5 | THEFT DETERENT SYS-FLEET IMMOBILIZER MODIFICATIONS (SEO) |
| 5SA | PACKAGE-DENALI OPTION 1 |
| 5VI | ACCESSORY-TIE DOWN RINGS - CARGO AREA |
| 5W7 | ACCESSORY-AIR FILTER - PERFORMANCE |
| 5Z4 | TIRE & WHEEL-SPARE WHEEL & CARRIER - NONE (SEO) |
| 63B | ACCESSORY-TONNEAU - RR COMPT - TRI FOLDING |
| 63G | ACCESSORY-TAILGATE ASSIST LIGHTING |
| 6K5 | SALES PACKAGE-CONVENIENCE II |
| 6M9 | TIRE SPARE-265/70R17 SL 115S BW AT (SE0) |
| 8F2 | ORNAMENTATION-NONE |
| 9B9 | GOVERNOR-ELECTRONIC SPEED SENSOR - 70 MPH |
| 9C2 | GOVERNOR-ELECTRONIC SPEED SENSOR - 65 MPH |
| 9D7 | GOVERNOR-ELECTRONIC SPEED SENSOR - 75 MPH |
| 9J4 | BUMPER RR-(NONE) |
| 9L3 | TIRE SPARE-NONE |
| 9L7 | EQUIPMENT-ACSRY WRG JUNC BLK |
| 9M4 | DECAL-ENDGATE - NONE (SE0) |
| 9R1 | DECAL-PICKUP BOX SIDE - NONE (SEO) |
| 9V5 | COLOR-WOODLAND GREEN (SEO) |
| 9W3 | COLOR-WHEATLAND YELLOW, LEAD FREE (SEO) |
| 9W4 | COLOR-TANGIER ORANGE, LEAD FREE (SEO) |
| A2S | ADJUSTER DRIVER SEAT-4WAY, DISCONT MAN RECLINE, MAN FORE/AFT |
| A2X | ADJUSTER DRIVER SEAT-8WAY, PWR RECLINE, PWR FORE/AFT, PWR HEIGHT, PWR TILT |
| A45 | MEMORY-SEAT ADJUSTER, MIRROR, POWER, DRIVER, PERSONALIZATION |
| A48 | WINDOW RR-FULL WIDTH, SLIDING, POWER |
| A50 | SEAT-FRT BKT |
| A52 | SEAT-FRT BENCH |
| A60 | LOCK CONTROL RR CMPT-LID, TAILGATE, KEY ACTIVATED |
| A68 | SEAT RR-SPLIT, FOLDING |
| A6Q | WINDOW REG DRVR DR-MANUAL OPERATED |
| A6R | WINDOW REG PASS DR-MANUAL OPERATED |
| A7E | ADJUSTER PASS ST-4WAY, DISCONT MAN RECLINE, MAN FORE/AFT |
| A7K | ADJUSTER PASS ST-8WAY, PWR RECLINE, PWR FORE/AFT, PWR HEIGHT, PWR TILT |
| AAC | PARTS PKG-SHIPPED LOOSE |
| ACO | IDENTIFICATION-ACCESSORY CATALOG OFFERING |
| AE7 | SEAT-FRT SPLIT, DRIVER, PASS |
| AED | WINDOW REG PASS DR-POWER OPERATED, EXPRESS DOWN |
| AEF | WINDOW REG PASS DR-POWER OPERATED, EXPRESS UP/DOWN |
| AEQ | WINDOW REG REAR DR-POWER OPERATED, EXPRESS DOWN |

| RPO | Description |
|---|---|
| AKO | WINDOW TYPE-PRIVACY |
| AKP | WINDOW TYPE-SOLAR ABSORBING |
| AL0 | SENSOR INDICATOR-INFLATABLE RESTRAINT, FRT PASS/CHILD PRESENCE DETECTOR |
| AQQ | LOCK CONTROL, ENTRY-REMOTE ENTRY, EXTENDED RANGE (MY 09 AND FUTURE) |
| ASV | EQUIPMENT-SENSOR AIR MOISTURE & W/S TEMP |
| ATH | LOCK CONTROL, ENTRY-REMOTE ENTRY, EXTENDED RANGE, PASSIVE ENTRY, ALL DOORS |
| AU3 | LOCK CONTROL-SIDE DR, ELEC |
| AXG | WINDOW REG DRVR DR-POWER OPERATED, EXPRESS UP/DOWN |
| AXK | VEHICLE TYPE-TRUCK |
| AY0 | RESTRAINT SYSTEM-SEAT, INFLATABLE, DRIVER & PASS FRT, SEAT SIDE, ROOF SIDE |
| AZ3 | SEAT-FRT SPLIT, DRIVER, PASS, FULL FEATURE CENTER |
| B1J | LINER-RR WHEELHOUSE |
| B26 | SALES PACKAGE-SAFETY PACKAGE VAR. 1 |
| B30 | COVERING FLOOR-CARPET |
| B32 | COVERING FRT-FLOOR MATS, AUX |
| B33 | COVERING REAR-FLOOR MATS, AUX |
| B34 | COVERING FRT-FLOOR MATS, CARPETED INSERT |
| B35 | COVERING REAR-FLOOR MATS, CARPETED INSERT |
| B59 | SALES PACKAGE-FUNCTIONAL PACKAGE |
| BAG | PARTS PKG-EXPORT |
| BAQ | SALES PACKAGE-STYLE VAR 1 |
| BG9 | COVERING FLOOR-RUBBER |
| BGP | SALES PACKAGE-SAFETY PACKAGE VAR. 2 |
| BRS | STEPS, RUNNINGBOARD-SIDE, RETRACTABLE, POWER, BRIGHT |
| BTM | SWITCH-ENGINE START, KEYLESS |
| BTV | REMOTE START-ENGINE |
| BVT | STEPS, RUNNINGBOARD-SIDE, CHROME |
| BWN | STEPS-CORNER ASSIST, BUMPER |
| C32 | HEATER AIR SYSTEM-HEATING/ DEFROSTER SYSTEM, REINFORCED, ELECTRIC |
| C49 | DEFOGGER-RR WINDOW, ELECTRIC |
| C4P | HVAC SYSTEM-AIR CONDITIONER FRT, SEMIAUTOMATIC, ELECTRONIC CONTROLS |
| C59 | VENT-AIR, CONSOLE, RR |
| C67 | HVAC SYSTEM-AIR CONDITIONER FRT, ELECTRONIC CONTROLS |

| RPO | Description |
|---|---|
| C9I | SWITCH-ROLL OVER SENSING |
| CF5 | ROOF-SUN, GLASS, SLIDING, ELEC |
| CGN | LINER-PUBX, SPRAY ON |
| CJ2 | HVAC SYSTEM-AIR CONDITIONER FRT, AUTO TEMP CONT, AUX TEMP CONT |
| CK2 | COUNTRY-YEMEN |
| CTT | HITCH ASSIST-GUIDELINES |
| CU7 | COUNTRY-KUWAIT |
| CU8 | COUNTRY-SAUDI ARABIA |
| CV3 | COUNTRY-MEXICO |
| CV8 | COUNTRY-IRAQ |
| CWM | SALES PACKAGE-TECHNOLOGY |
| CX9 | COUNTRY-LEBANON |
| CY2 | COUNTRY-JORDAN |
| D07 | CONSOLE-FRT COMPT, FLOOR, CUSTOM |
| D31 | MIRROR I/S R/V-TILT |
| D3S | COUNTRY-QATAR |
| D4C | COUNTRY-BAHRAIN |
| D5P | COUNTRY-UNITED ARABIC EMIRATES |
| D72 | HANDLE O/S DOOR-BLACK |
| D75 | HANDLE O/S DOOR-BODY COLOR |
| DD8 | MIRROR I/S R/V-LT SENSITIVE |
| DEN | MIRROR O/S-LH & RH, MANUAL, MANUAL FOLD, FLAT/DRVR, CNVX/PASS |
| DEZ | MIRROR O/S-LH & RH, ELEC REMOTE, POWER FOLD, HEAT, PERM LIGHT, LT SENSITIVE DRVR, FLAT/DRVR, CNVX/PASS |
| DH6 | MIRROR I/S FRT VAN-LH & RH, SUNSHADE, ILLUM |
| DLF | MIRROR O/S-LH & RH, RC, ELEC, HEAT, MAN FOLD, FLAT/DRVR, CNVXPASS |
| DNS | EQUIPMENT-SUPPLIER INSTALLED |
| DP6 | MIRROR PROVISIONS-HOUSING, PAINTED |
| DP9 | MIRROR PROVISIONS-HOUSING, CHROME |
| DRZ | MIRROR I/S R/V-LT SENSITIVE, FULL VIDEO DISPLAY |
| DT4 | ASHTRAY-CIGARETTE LIGHTER |
| E20 | HANDLE O/S DOOR-CHROME |
| E35 | PICKUP BOX INNER-STEEL |
| E63 | BODY EQUIPMENT-FLEETSIDE PICK-UP BOX |
| E6H | COUNTRY-OMAN |
| EF7 | COUNTRY-UNITED STATES OF AMERICA (USA) |
| ENL | ENG CONTROL DISABLE-STOP/START, NON-LATCHING |
| EXP | EXPORT- |

| RPO | Description |
|---|---|
| F48 | CHASSIS DRIVE LINE-ALL WHEEL DRIVE (AWD)/FOUR WHEEL DRIVE(4WD), DRIVER SELECT |
| FE9 | CERTIFICATION-EMISSION, FEDERAL |
| FHS | VEHICLE FUEL-GASOLINE E85 |
| FHX | VEHICLE FUEL-DIESEL B20 |
| FJW | VEHICLE FUEL-GASOLINE E15 |
| FWI | PLANT CODE-FT WAYNE, IN, USA |
| G1W | PRIMARY COLOR-EXTERIOR, ABALONE WHITE TRICOAT(140X) |
| G2X | PRIMARY COLOR-EXTERIOR, HAVANA MET-1 (439C) |
| G7C | PRIMARY COLOR-EXTERIOR, PULL ME OVER RED SOLID (130X) |
| G80 | AXLE POSITRACTION-LIMITED SLIP |
| G9K | PRIMARY COLOR-EXTERIOR, SATIN STEEL GRAY MET-3 (464C) |
| GA0 | PRIMARY COLOR-EXTERIOR, SOME KINDA BLUE MET -1 (619D) |
| GAN | PRIMARY COLOR-EXTERIOR, SWITCHBLADE SILVER MET (G) 636R |
| GAZ | PRIMARY COLOR-EXTERIOR, SUMMIT WHITE (G) 8624 |
| GBA | PRIMARY COLOR-EXTERIOR, BLACK (G) 8555 |
| GFF | TRIM PACKAGE-BASE |
| GFG | TRIM PACKAGE-AT4 |
| GFI | TRIM PACKAGE-SLE |
| GFJ | TRIM PACKAGE-ELEVATION |
| GFU | TRIM PACKAGE-SLT |
| GFW | TRIM PACKAGE-DENALI |
| GJI | PRIMARY COLOR-EXTERIOR, DARK SHADOW MET -1 (626D) |
| GPJ | PRIMARY COLOR-GLORY RED TINT-2 (434B) |
| GS6 | PRIMARY COLOR-EXTERIOR, SCORPION MET -1 (634D) |
| GU5 | AXLE REAR-3.23 RATIO |
| GU6 | AXLE REAR-3.42 RATIO |
| H0U | INTERIOR TRIM CONFIG-CLOTH, LEVEL 2, JET BLACK |
| H1T | INTERIOR TRIM CONFIG-CLOTH, LEVEL 1, JET BLACK |
| H1Y | INTERIOR TRIM CONFIG-LEATHER, LEVEL 2, JET BLACK |
| H2G | INTERIOR TRIM CONFIG-VINYL, LEVEL 1, JET BLACK |
| H2X | INTERIOR TRIM CONFIG-LEATHER, LEVEL 4, JET BLACK |
| HS1 | ALERT-SAFETY HAPTIC SEAT |
| HV5 | INTERIOR TRIM CONFIG-CLOTH, LEVEL 2, GIDEON/VY DK ATMOSPHERE |
| HVC | INTERIOR TRIM CONFIG-LEATHER, LEVEL 1, GIDEON/VY DK ATMOSPHERE |
| HVD | INTERIOR TRIM CONFIG-LEATHER, LEVEL 2, JET BLACK/KALAHARI |
| HVE | INTERIOR TRIM CONFIG-LEATHER, LEVEL 2, GIDEON/VY DK ATMOSPHERE |
| HVH | INTERIOR TRIM CONFIG-LEATHER, LEVEL 4, MED DARK ASH GRAY / VY DK ATMOSPHERE |
| I19 | ENGINEERING YEAR-2019 |
| IOR | RADIO-INFOTAINMENT SYSTEM - 3.X LOW HMI, MIDLEVEL CONNECTIVITY 3.X |
| IOS | RADIO-INFOTAINMENT SYSTEM - 3.X MID/HIGH HMI, ENHANCED CONNECTIVITY, VOICE RECOGNITION, MID SD NAV CAPABLE |
| IOT | RADIO-INFOTAINMENT SYSTEM - 3.X MID/HIGH HMI, ENHANCED CONNECTIVITY, VOICE RECOGNITION, PREMIUM SD NAV |
| J61 | BRAKE SYSTEM-POWER, FRT & RR DISC, ABS, 17" |
| JBP | BRAKE LINING WEAR SY-LIFE SPAN PROGNOSTIC INDICATOR |
| JHD | CONTROL-HILL DESCENT, GEAR HOLD |
| JL1 | CONTROL-INTEGRATED TRAILER BRAKE |
| K05 | HEATER ENG-BLOCK |
| K34 | CRUISE CONTROL-AUTOMATIC, ELECTRONIC |
| K47 | AIR CLEANER-HIGH CAPACITY |
| K4C | CHARGER-INDUCTIVE PORTABLE WIRELESS DEVICE |
| KA1 | HEATER SEAT FRT-DRVR & PASS |
| KA6 | HEATER SEAT-REAR |
| KC4 | COOLING SYSTEM-ENG OIL |
| KC5 | RECEPTACLE-ELECTRICAL, ACCESSORY |
| KC9 | RECEPTACLE-ELECTRICAL, ACCESSORY 110 VOLT, PUBX |
| KCA | RECEPTACLE-ELECTRICAL, ACCESSORY 230 VOLT, PUBX |
| KI3 | STEERING WHEEL HEAT-AUTOMATIC |
| KI4 | RECEPTACLE-ELECTRICAL, ACCESSORY 110 VOLT |
| KI5 | RECEPTACLE-ELECTRICAL, ACCESSORY 230 VOLT |
| KL9 | ENG CONTROL-STOP/START SYS, CONVENTIONAL AT, CONVENTIONAL MT OR BRAKE RELEASE LATE RESTART |
| KNP | COOLING SYSTEM-TRANS, HD |
| KPA | RECEPTACLE-ELECTRICAL, FRT CONSOLE RR |
| KQV | HEATER-SEAT, VENTED, FRT |
| KW5 | GENERATOR-220 AMP |
| KW7 | GENERATOR-170 AMP |
| L3B | ENGINE-GAS, 4 CYL, L4, 2.7L, SIDI, VVT, TURBO, DOHC, ALUM |
| L82 | ENGINE-GAS, 8 CYL, 5.3L, V8, DI, AFM, ALUM, GEN 5, VAR 1 |

| RPO | Description |
|---|---|
| L84 | ENGINE-GAS, 8 CYL, 5.3L, V8, DI, DFM, ALUM, GEN 5 |
| L87 | ENGINE-GAS, 8 CYL, V8, 6.2L, DI, DFM, ALUM, GEN 5 |
| LM2 | ENGINE-DIESEL, 6 CYL, 3.0L, CRI, L6, DOHC, TURBO, VGT, ALUM, CSS50V |
| LV3 | ENGINE-GAS, 6 CYL, 4.3L, GEN 5, SIDI, V6, VVT, OHV, E85 MAX, ALUM |
| MAH | MARKETING AREA-US, PUERTO RICO/USVI |
| MAM | MARKETING AREA-MIDDLE EAST |
| MBC | MARKETING AREA-CANADA |
| MCR | RECEPTACLE-MEMORY CARD |
| MCX | MARKETING AREA-MEXICO |
| MCY | PORT, ELEK DEVICE-USB ONLY |
| MCZ | PORT, MULTI ELEK DEV-USB |
| MQB | TRANSMISSION-AUTO 10 SPD, 10L80, ATSS, CPA, GEN 2 |
| MQE | TRANSMISSION-AUTO 8 SPD, 8L90, ATSS, CPA, GEN 1 |
| MSL | PLANT CODE-SILAO, MEXICO |
| MYC | TRANSMISSION-AUTO 6 SPD, HMD, 6L80 |
| N01 | LOCK CONTROL-FUEL PLUG |
| N06 | STEERING COLUMN LOCK-ELECTRICAL |
| N10 | EXHAUST SYSTEM-DUAL |
| N33 | STEERING COLUMN-TILT TYPE |
| N37 | STEERING COLUMN-TILT, TELESCOPING |
| NB5 | EXHAUST SYSTEM-SINGLE |
| NE1 | CERTIFICATION-EMISSION, GEOGRAPHICALLY RESTRICTED REGISTRATION FOR VEHICLES UP TO 14, 000 LBS GVW (USE 2003 MDL YR |
| NE8 | EVAPORATIVE SYSTEM-LEVEL 3 EMISSIONS |
| NHT | PERFORMANCE PACKAGE-ENHANCED TOWING |
| NK5 | STEERING WHEEL-STANDARD |
| NP0 | TRANSFER CASE-ACTIVE, SINGLE SPEED,SWITCH ACTIVATED,ALUM |
| NP5 | STEERING WHEEL-LEATHER WRAPPED |
| NQH | TRANSFER CASE-ACTIVE, TWO SPEED, SWITCH ACTIVATED, ALUM |
| NTB | EMISSION SYSTEM-FEDERAL, TIER 3 |
| NUB | EMISSION SYSTEM-CALIFORNIA, ULEV70 |
| NUC | EMISSION SYSTEM-CALIFORNIA, ULEV50 |
| NUF | EMISSION SYSTEM-CALIFORNIA, ULEV125 |
| NZH | WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 8 |
| NZM | WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 10 |
| NZZ | SALES PACKAGE-SKID PLATE, "OFF ROAD" SPORT |
| PTT | TRAILER TIRE PRESSUR-MANUAL LEARN |
| PZ8 | IMAGE ADJUSTMENT-HITCH VIEW |
| Q5U | WHEEL-17 X 8.0, J, ALUMINUM, DESIGN 2 |
| Q7L | WHEEL-22 X 9.0, J, ALUMINUM, DESIGN 2 |
| QAB | TIRE ALL-275/60R20 SL 115S BW AL2 |
| QAE | TIRE ALL-275/60R20 SL 115S BW AT |
| QAQ | TIRE SPARE-255/80R17 SL 115S BW SPR |
| QBN | TIRE ALL-255/70R17 SL 112S BW ALS VAR 1 |
| QBR | TIRE SPARE-255/70R17 SL 112S BW ALS VAR1 |
| QDF | TIRE ALL-265/65R18 SL 114T BW ALS VAR 1 |
| QDS | TIRE ALL-265/65R18 SL 114T WOL AT VAR 1 |
| QDV | TIRE ALL-265/70R17 SL 115S BW AT VAR 1 |
| QK1 | GATE TYPE-PUBX END STANDARD |
| QK2 | GATE TYPE-PUBX END ENHANCED |
| QT2 | GATE FUNCTION-MANUAL |
| QT3 | GATE FUNCTION-MANUAL ASSIST |
| QT5 | GATE FUNCTION-MANUAL ASSIST POWER RELEASE |
| R13 | APPEARANCE PACKAGE-CHROME EXTERIOR |
| R3O | TIRE ALL-LT275/65R18 C 110/113Q BW OOR, VAR1 |
| R7O | SEAT RR-SPLIT, FOLDING, BASE STORAGE |
| RBR | WHEEL-22 X 9.0, J, STEEL, DESIGN 1 |
| RC5 | TIRE ALL-LT265/70R17 C 112Q BW AT |
| RCP | ACCESSORY TIRE-TIRE ALL - LT275/ 65R18 C 110/113Q BW MT VAR1 |
| RD3 | WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 3 |
| RD6 | WHEEL-17 X 8.0, J, STEEL, DESIGN 2 |
| RDI | ACCESSORY-KEYLESS ENTRY |
| RHM | TIRE SPARE-LT265/70R17 C 112Q BW AT |
| RIA | ACCESSORY-FLOOR LINER - CONTOURED |
| RM7 | WHEEL SPARE-17 X 8.0, J, STEEL, DESIGN 1 |
| RT5 | WHEEL-18 X 8.5, J, ALUMINUM, DESIGN 1 |
| RTL | WHEEL-20 X 9.0, J, ALUMINUM, DESIGN 1 |
| RVG | ACCESSORY-ADAPTER - TRAILER HARNESS |
| RVQ | ACCESSORY-ASSIST STEPS - TUBULAR - OVAL - BLACK |
| RVS | ACCESSORY-ASSIST STEPS - TUBULAR - ROUND - BLACK |
| RW9 | ACCESSORY-BED STORAGE BOX - SIDE FULL LENGTH - COMPOSITE |
| RWL | CHASSIS DRIVE LINE-REAR WHEEL DRIVE (RWD) |
| RWR | ACCESSORY-CAMERA - REAR VISION |

| RPO | Description |
|---|---|
| RWS | ACCESSORY-FLOOR MATS - CARPET |
| RXH | ACCESSORY-CENTER CAP - WHEEL - DESIGN 1 |
| RXJ | ACCESSORY-CENTER CAP - WHEEL - DESIGN 2 |
| RXQ | ACCESSORY-CONVENIENCE NET - BED MOUNTED |
| RYT | ACCESSORY-FIRST AID KIT |
| S08 | ACCESSORY-HIGHWAY SAFETY KIT |
| S0P | ACCESSORY-INSERT - FLOOR CONSOLE |
| S0Y | ACCESSORY-LAMPS - CARGO AREA |
| S1O | ACCESSORY-CONTAINER - LOCKABLE STORAGE - INTERIOR |
| S1V | ACCESSORY-HEADPHONES - RSE |
| S3U | ACCESSORY-LAMP KIT - FRONT FOG |
| S41 | ACCESSORY-LINER - WHEEL HOUSE |
| S47 | ACCESSORY-LUG NUTS |
| S4X | ACCESSORY-MIRROR COVERS/SKULL CAPS - ALTERNATE FINISH - PAINTED |
| S54 | ACCESSORY-NAVIGATION MAP UPDATES |
| S6L | ACCESSORY-PROTECTOR - ROCKER PANEL |
| S6N | ACCESSORY-RECEIVER COVER - TRAILER HITCH |
| S6P | ACCESSORY-REMOTE START KIT |
| SAF | LOCK-SPARE TIRE, HOIST SHAFT |
| SBY | ACCESSORY-SPORT BAR - BED MOUNTED - DESIGN 1 |
| SCZ | ACCESSORY-TAILGATE HANDLE - ALTERNATE FINISH - CHROME |
| SD5 | ACCESSORY-TIRE PRESSURE MONITOR |
| SDA | ACCESSORY-TOW HOOKS |
| SDE | ACCESSORY-TRAILER HITCH - REMOVABLE |
| SES | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 1 |
| SEU | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 2 |
| SEV | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 3 |
| SEW | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 4 |
| SF0 | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 7 |
| SF6 | ACCESSORY-WHEEL FLARES - ALTERNATE DESIGN - PAINTED |
| SFE | ACCESSORY-WHEEL LOCKS |
| SFJ | ACCESSORY-WINDOW SHADES - REFLECTIVE |
| SFW | CALIBRATION-BACK UP ELECTRICAL ALARM (SEO) |
| SFZ | ACCESSORY-EMBLEM - EXTERIOR - DESIGN 1 |

| RPO | Description |
|---|---|
| SG3 | ACCESSORY-SPRINGS - SPORT SUSPENSION |
| SGM | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 9 |
| SHD | ACCESSORY-WHEEL - 22 X 9.0 - J - ALUMINUM - DESIGN 10 |
| SIE | ACCESSORY-PUBX TIERED STORAGE |
| SIL | ACCESSORY-RSE - PORTABLE MEDIA CONNECTIVITY PKG - W/INTEGRATED POWER |
| SJ9 | ACCESSORY-GRILLE / GRILLE INSERTS - ALTERNATE FINISH 1 |
| SKY | ACCESSORY-WHEEL - 18 X 8.5 - J - ALUMINUM - DESIGN 1 |
| SL7 | ACCESSORY-PUBX LADDER / UTILITY RACK STANCHIONS |
| SNR | SEAT RR-SPLIT, FOLDING, DELUXE STORAGE |
| SPY | ACCESSORY-LUG NUTS - ALT FINISH |
| SPZ | ACCESSORY-WHEEL LOCKS - ALT FINISH |
| SR3 | ACCESSORY-RSE - DUAL HEADREST DISPLAY W/WIRELESS CONNECTIVITY & DVD |
| SUR | ACCESSORY-TRAILER TIRE PRESSURE MONITOR |
| T3U | LAMP FRT FOG-FRT FOG |
| TDM | MODE-TEEN DRIVER SETTINGS |
| TGK | COLOR COMBINATION-SOLID, SPECIAL PAINT |
| TQ5 | HEADLAMP HIGH BEAM-AUTO CONTROL |
| TRO | ACCESSORY-CAMERA PKG - TRAILERING AUX MOUNTED |
| TT0 | ACCESSORY-TRAILERING HOOKUP ASSIST |
| TUF | ORNAMENTATION-EMBLEM, "TEXAS EDITION" |
| U12 | LAMP-EXTR, OSRV MIRROR, TASK |
| U19 | SPEEDOMETER-INST, KILO & MILES, KILO ODOMETER |
| U1D | INDICATOR-TRAILER INFORMATION |
| U2J | DIGITAL AUDIO SYSTEM-S-BAND - NONE |
| U2K | DIGITAL AUDIO SYSTEM-S-BAND |
| U2L | RECEPTION-HD |
| U73 | ANTENNA-FIXED, RADIO |
| U95 | SPEAKER SYSTEM-2, BASE |
| UD5 | PARK ASSIST-FRONT AND REAR |
| UD7 | PARK ASSIST-REAR |
| UDC | DISPLAY INSTRUMENT-DRIVER INFO ENHANCED (ONE COLOR GRAPHIC) |
| UDD | DISPLAY INSTRUMENT-DRIVER INFO ENHANCED (MULTI COLOR STANDARD GRAPHIC) |
| UDU | PROVISIONS-REAR CAMERA PREP |

| RPO | Description |
|---|---|
| UE0 | COMMUNICATION SYSTEM-VEHICLE - NONE |
| UE1 | COMMUNICATION SYSTEM-VEHICLE, ONSTAR |
| UE4 | SENSOR INDICATOR-FOLLOWING DISTANCE |
| UEU | SENSOR INDICATOR-FORWARD COLLISION ALERT |
| UF2 | LAMP-CARGO |
| UFG | REAR CROSS TRAFFIC-ALERT |
| UG1 | OPENER-GARAGE DOOR, UNIVERSAL |
| UGA | HOOK-TOW, RED |
| UHN | WHEEL-18 X 8.5, J, ALUMINUM, DESIGN 3 |
| UHS | DISPLAY INSTRUMENT-DRIVER INFO ENHANCED (MULTI COLOR ENHANCED GRAPHIC) |
| UHX | LANE ACTIVE SAFETY-KEEP ASSIST |
| UHY | COLL IMMINENT BRK-LOW SPEED, VEH FWD MOVEMENT, BRAKE PREFILL, INTEGRATED BRAKE ASSIST |
| UIJ | INFOTAINMENT DISPLAY-NORMALLY BLACK COLOR (TFT), 8", WVGA 800X480P |
| UIK | INFOTAINMENT DISPLAY-NORMALLY BLACK COLOR (TFT), 8", WXGA 1280X768P |
| UIR | INFOTAINMENT DISPLAY-NORMALLY BLACK COLOR (TFT), 7", WVGA 800X480P |
| UJM | TIRE PRESS INDICATOR-MANUAL LEARN |
| UK3 | CONTROL-STEERING WHEEL, ACCESSORY |
| UKC | SIDE ACTIVE SAFETY-OBSTACLE DETECTION ENHANCED |
| UKJ | PED DETECTION FRT-BASIC, PEDESTRIANS |
| UL8 | FREQUENCIES-SAUDI ARABIAN |
| ULK | ACCESSORY-TOW HOOKS - RED |
| UMN | SPEEDOMETER-INST, MILES & KILO, MILES ODOMETER |
| UQA | SPEAKER SYSTEM-PREMIUM AUDIO, BRANDED AMPLIFIER |
| UQF | SPEAKER SYSTEM-STANDARD AUDIO |
| URC | SWITCH-FLEXRIDE MODE SYSTEM |
| USS | RECEPTACLE-USB CHARGE PORT |
| UTJ | THEFT DETERENT-ELECTRICAL, UNAUTHORIZED ENTRY |
| UV2 | VISION-360 VIEW, MONO, HD DIGITAL |
| UV6 | HEAD UP DISPLAY-WINDSHIELD |
| UVB | VISION-REAR VIEW, MONO, HD DIGITAL |
| UVC | VISION-REAR VIEW, MONO, ANALOG |
| UVI | VISION-270 & REAR TRAILER VIEW, MONO, HD DIGITAL(DO NOT USE AFTER MY2022) |
| V46 | BUMPER FRT-CHROME |
| V76 | HOOK-TOW |

| RPO | Description |
|---|---|
| V87 | VEHICLE STATEMENT-VEHICLE LABEL CONTENT - GULF STATES ORGANIZATION |
| V8C | VEHICLE STATEMENT-VEHICLE LABEL CONTENT - NO CERT STATEMENT |
| V8D | VEHICLE STATEMENT-VEHICLE LABEL CONTENT - U.S. FMVSS |
| V8E | VEHICLE STATEMENT-VEHICLE LABEL CONTENT - CANADA CMVSS |
| VAV | ACCESSORY-FLOOR MATS - ALL WEATHER |
| VB5 | BUMPER FRT-COLOR |
| VBJ | ACCESSORY-UNDERSEAT STORAGE |
| VBN | ACCESSORY-PUBX CARPET |
| VBR | ACCESSORY-PUBX RUBBER MAT |
| VBX | LANGUAGE LABEL-ARABIC |
| VGC | PROTECTOR-FILM, PAINT ETCH PREVENTIVE |
| VH6 | BUMPER FRT-BLACK |
| VJG | BUMPER RR-BLACK |
| VJH | BUMPER RR-CHROME |
| VK3 | LICENSE PLATE FRONT-FRT MOUNTING PKG |
| VKU | ACCESSORY-MIRROR CAPS - CHROME |
| VKW | ACCESSORY-ORGANIZER - FRONT CONSOLE |
| VKY | ACCESSORY-DOOR HANDLES - ALTERNATE FINISH - CHROME |
| VLQ | HOOK-TOW, CHROME |
| VOZ | ACCESSORY-TONNEAU - RR COMPT - HARD FOLDING - ALT DESIGN |
| VPB | ACCESSORY-TONNEAU - RR COMPT - VINYL W/ INTEGRAL CROSSBOW SUPPORTS |
| VPH | VEHICLE PREPARATION-OVERSEAS DELIVERY |
| VQK | ACCESSORY-SPLASH GUARDS - CUSTOM MOLDED |
| VQM | ACCESSORY-ASSIST STEPS - CHROME |
| VQO | ACCESSORY-ASSIST STEPS - BLACK |
| VQY | ACCESSORY-TOW HOOKS - CHROME |
| VQZ | ACCESSORY-EXHAUST TIP - DESIGN 1 |
| VST | ACCESSORY-SILL PLATES - ALTERNATE DESIGN 1 |
| VSX | LABEL-TOWING |
| VT2 | ACCESSORY-ASSIST STEPS - ALTERNATE FINISH |
| VT5 | BUMPER RR-COLOR KEYED |
| VT7 | OWNERS MANUAL-ENGLISH LANGUAGE |
| VTI | SHUTTERS-FRONT GRILLE, ACTIVE, UPR |
| VUK | ACCESSORY-TAILGATE LINER - PUBX |
| VW9 | ACCESSORY-CENTER CAP - WHEEL - DESIGN 3 |

| RPO | Description |
|---|---|
| VWD | ACCESSORY-CENTER CAP - WHEEL - DESIGN 4 |
| VXH | ACCESSORY-ASSIST STEPS - TUBULAR - CHROME - OVAL |
| VXJ | ACCESSORY-ASSIST STEPS - TUBULAR - CHROME - ROUND |
| VXT | VEHICLE TYPE-INCOMPLETE |
| VYU | PROVISIONS-SNOW PLOW PREP |
| VZX | ACCESSORY-PUBX BEDLINER |
| W09 | ACCESSORY-TAILGATE GAP COVER |
| W2D | ACCESSORY-CARGO NET |
| WBC | ACCESSORY-EXHAUST UPGRADE |
| WLD | WINDOW CONTROL-REMOTE EXPRESS DOWN, ALL WINDOWS |
| WMI | SHUTTERS-FRONT GRILLE, ACTIVE, UPR AND LWR |
| WMK | VIN MODEL YEAR-2019 |
| WPC | SALES PACKAGE-COMFORT AND CONVENIENCE |
| WPF | SALES PACKAGE-PREFERRED |
| X31 | APPEARANCE PACKAGE-GMC "X31 OFF ROAD" |
| XCE | TIRE ALL-275/50R22 SL 111T BW AL2 VAR 1 |
| XCK | TIRE ALL-265/65R18 SL 114T BW AT VAR1 |
| XCQ | TIRE SPARE-265/70R17 SL 115S BW SPR VAR1 |

| RPO | Description |
|---|---|
| XD5 | ACCESSORY TIRE-TIRE ALL-275/50R22 SL 111T BW AL2 |
| YF5 | CERTIFICATION-EMISSION, CALIFORNIA |
| YM8 | IDENTIFICATION-LIMITED PERSONALIZATION OPTION (LPO) |
| Z45 | CHASSIS PACKAGE-CONTINUOUS DAMPING CONTROL |
| Z49 | COUNTRY-CANADA |
| Z5X | MIRROR PROVISIONS-ARABIC LANGUAGE |
| Z60 | CHASSIS PACKAGE-HIGH PERFORMANCE |
| Z71 | CHASSIS PACKAGE-"OFF ROAD" |
| Z7X | CHASSIS PACKAGE-"OFF ROAD" 2 INCH LIFT |
| Z82 | TRAILER PROVISIONS-SPECIAL EQUIPMENT, H.D. |
| Z85 | CHASSIS PACKAGE-INCREASED CAPACITY |
| Z88 | MARKET BRAND-GMC |
| ZL3 | SALES PACKAGE-CONVENIENCE |
| ZL6 | SALES PACKAGE-TRAILER INTEGRATION |
| ZLQ | SALES PACKAGE-LS FLEET |
| ZW9 | BODY EQUIPMENT-BASE BODY OR CHASSIS |

# Section 2

# Body Systems

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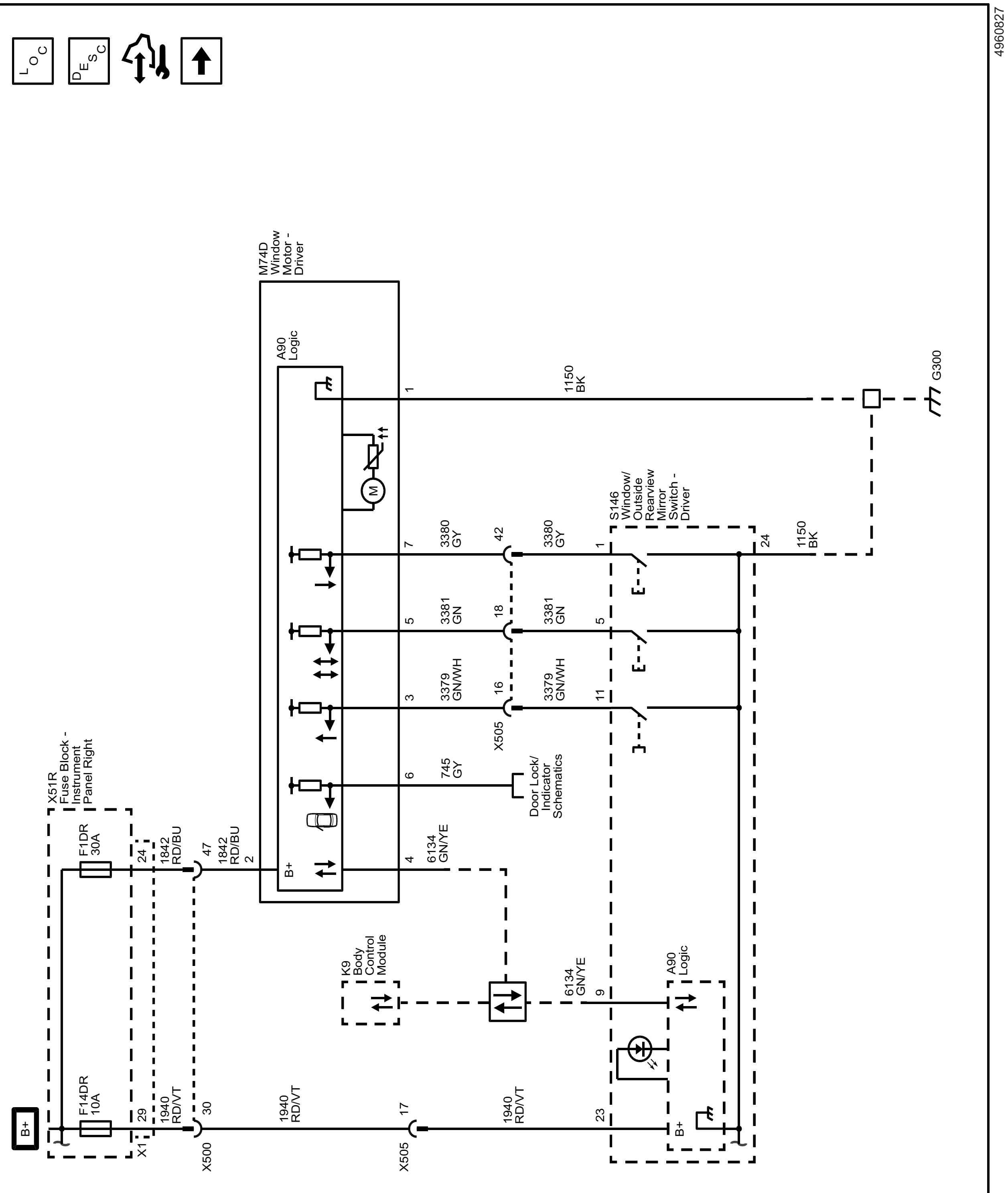
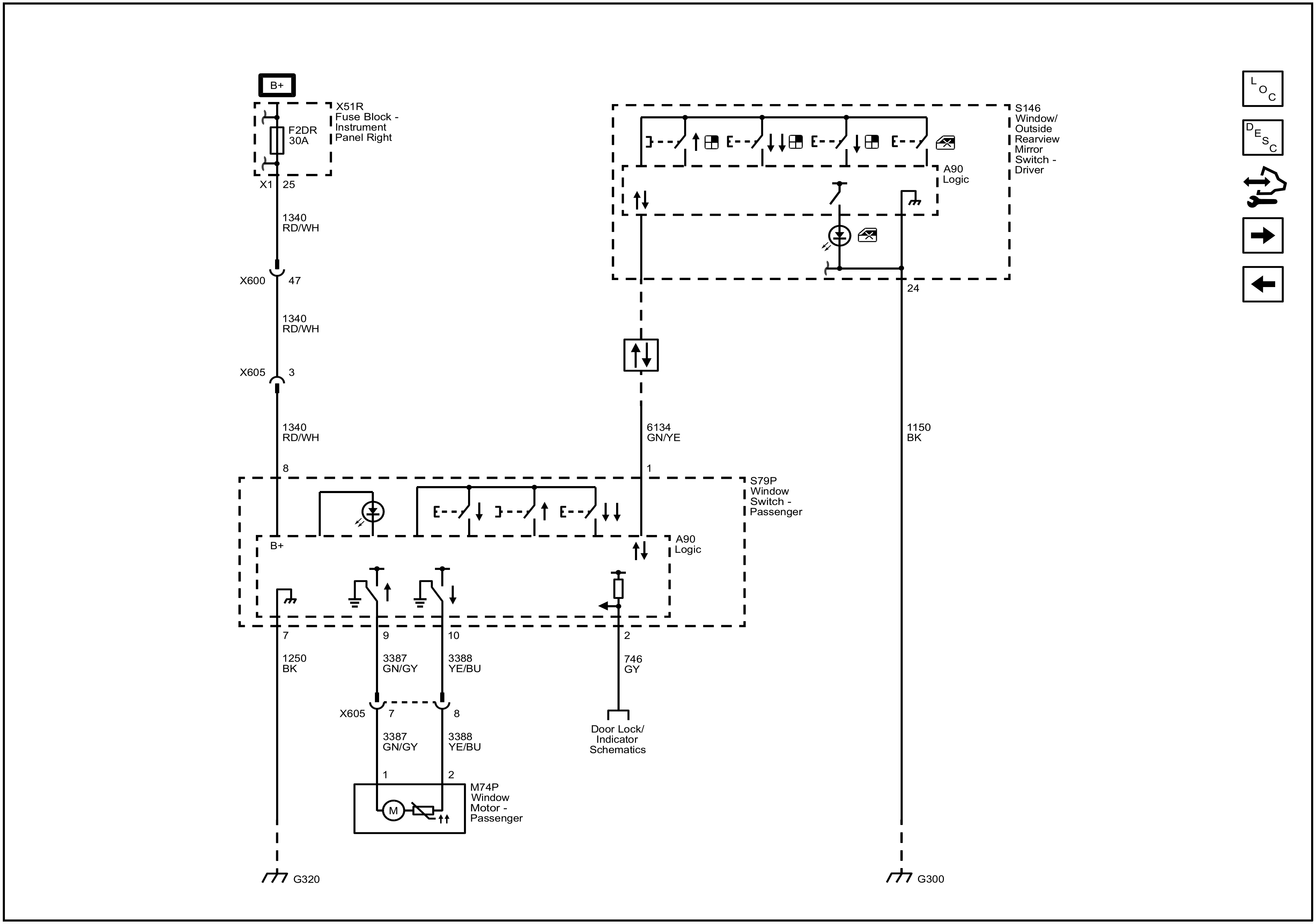
# Fixed and Moveable Windows

## Schematic and Routing Diagrams

## Moveable Window Schematics (Driver Window (AXG))

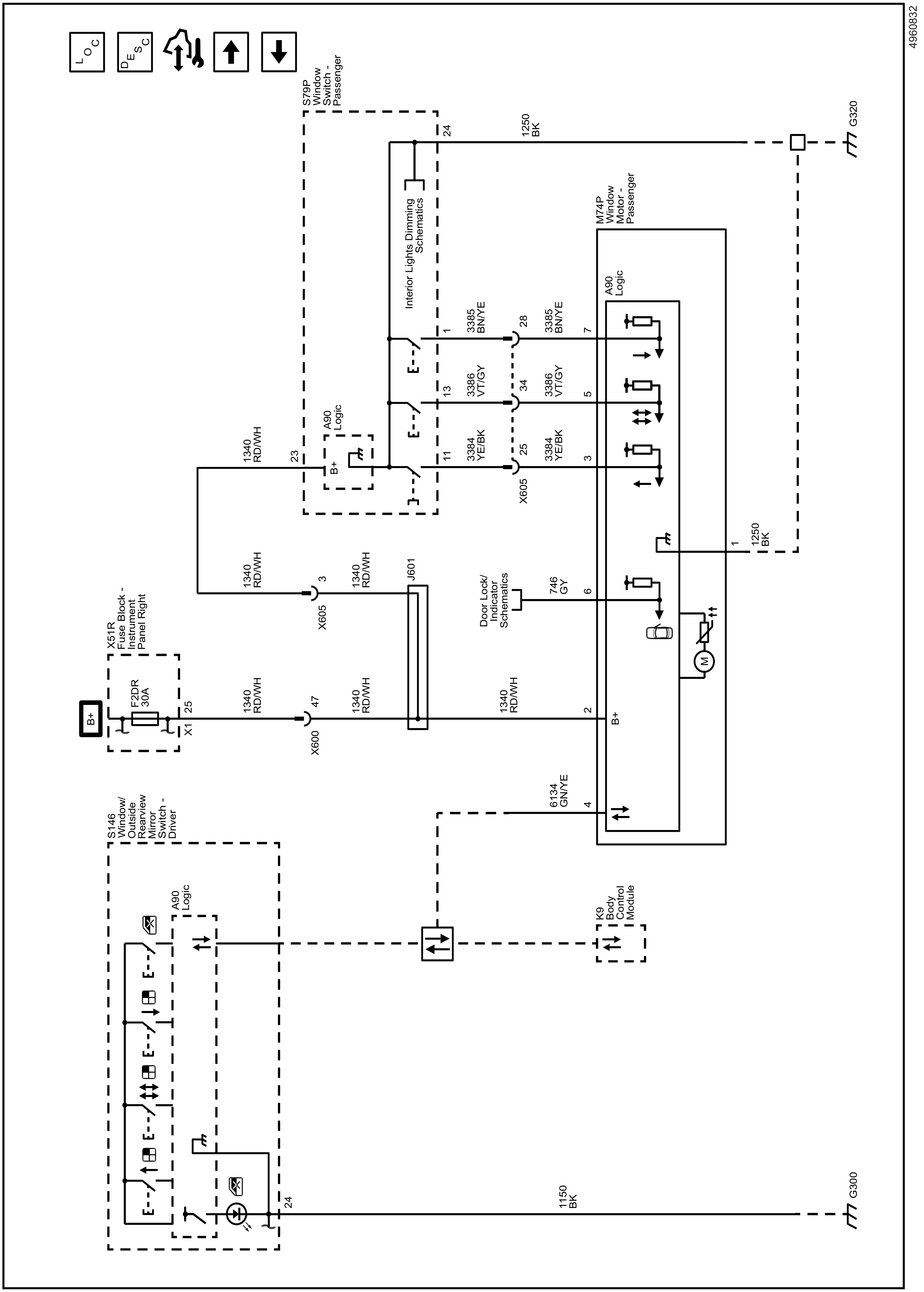

4960827
LOC
DESC
B+
X51R Fuse Block - Instrument Panel Right
F1DR 30A
F14DR 10A
24
29
X1
1842 RD/BU
1940 RD/VT
47
30
X500
1842 RD/BU
2
1940 RD/VT
17
X505
M74D Window Motor - Driver
A90 Logic
B+
M
1
4
6
3
5
7
1150 BK
6134 GN/YE
745 GY
3379 GN/WH
3381 GN
3380 GY
Door Lock/ Indicator Schematics
X505
16
18
42
K9 Body Control Module
6134 GN/YE
9
1940 RD/VT
23
S146 Window/ Outside Rearview Mirror Switch - Driver
11
5
1
24
1150 BK
A90 Logic
B+
G300

## Moveable Window Schematics (Passenger Window (AED))

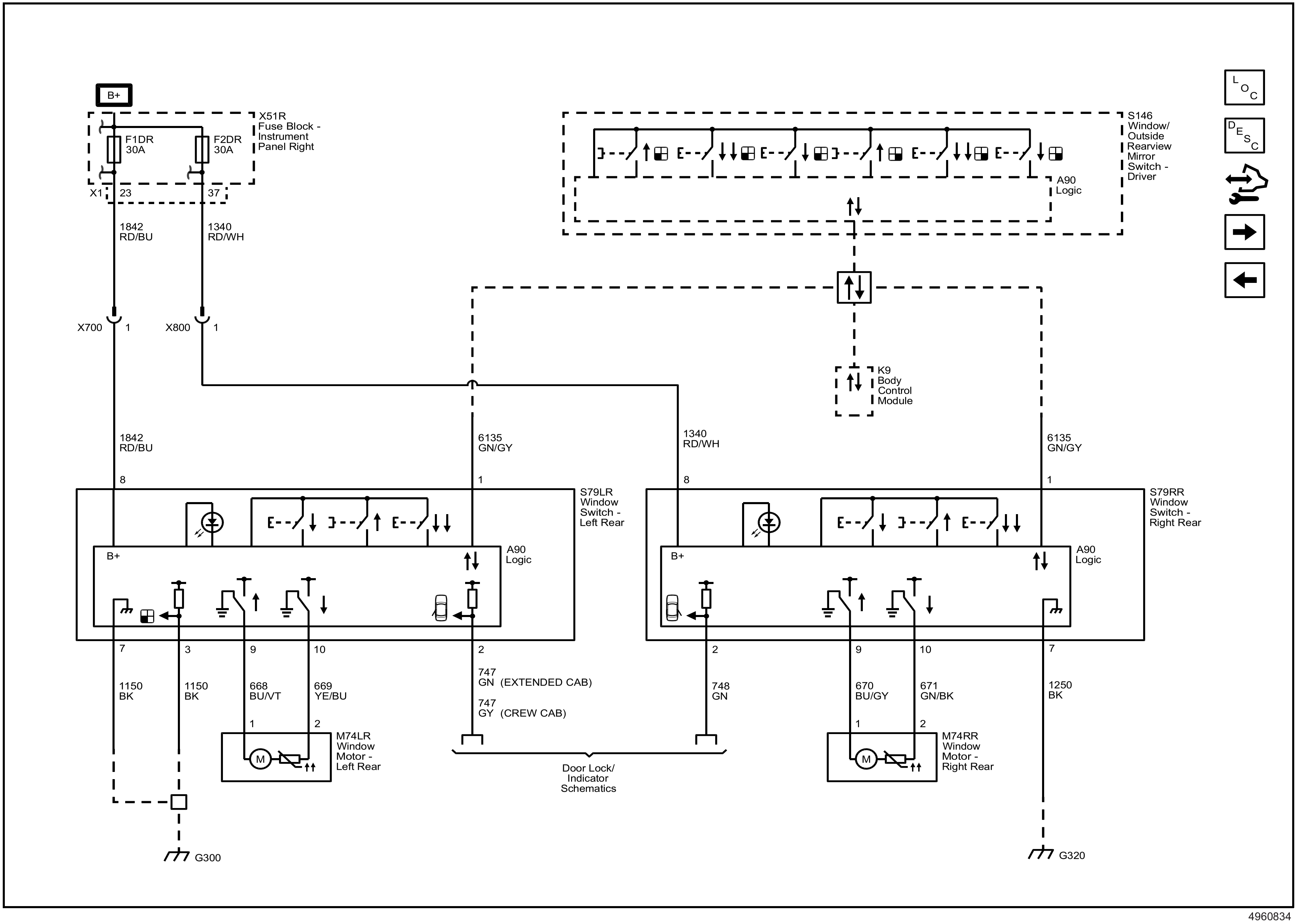


B+
X51R
Fuse Block -
Instrument
Panel Right
F2DR
30A
X1 25
1340
RD/WH
X600 47
1340
RD/WH
X605 3
1340
RD/WH
8
S79P
Window
Switch -
Passenger
A90
Logic
B+
7
1250
BK
G320
9
3387
GN/GY
10
3388
YE/BU
X605 7
8
3387
GN/GY
3388
YE/BU
1
2
M74P
Window
Motor -
Passenger
M
2
746
GY
Door Lock/
Indicator
Schematics
1
6134
GN/YE
S146
Window/
Outside
Rearview
Mirror
Switch -
Driver
A90
Logic
24
1150
BK
G300
LOC
DESC
4960829

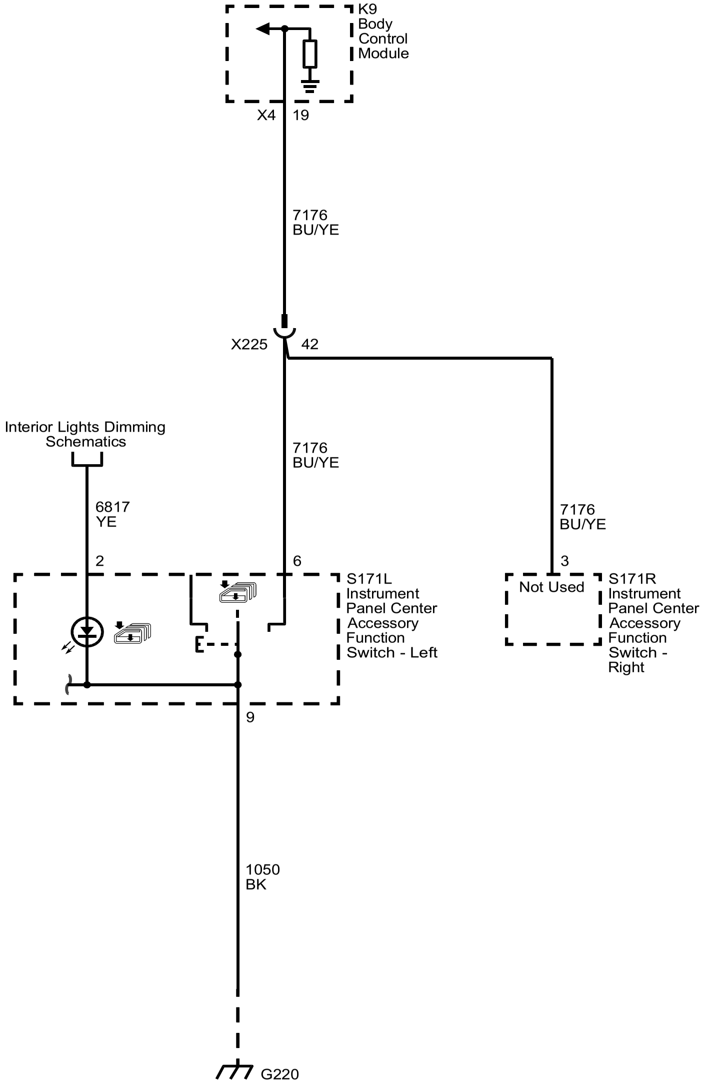
## Moveable Window Schematics (Passenger Window (AEF))


L O C
D E S C
S79P Window Switch - Passenger
24
1250 BK
G320
Interior Lights Dimming Schematics
M74P Window Motor - Passenger
A90 Logic
1
3385 BN/YE
28
3385 BN/YE
7
13
3386 VT/GY
34
3386 VT/GY
5
11
3384 YE/BK
25
3384 YE/BK
3
X605
1340 RD/WH
23
A90 Logic
B+
1
1250 BK
1340 RD/WH
3
1340 RD/WH
J601
X605
Door Lock/ Indicator Schematics
746 GY
6
M
X51R Fuse Block - Instrument Panel Right
B+
F2DR 30A
25
X1
1340 RD/WH
47
X600
1340 RD/WH
1340 RD/WH
2
B+
6134 GN/YE
4
S146 Window/ Outside Rearview Mirror Switch - Driver
A90 Logic
K9 Body Control Module
24
1150 BK
G300
4960832

## Moveable Window Schematics (Rear Windows (AEQ))

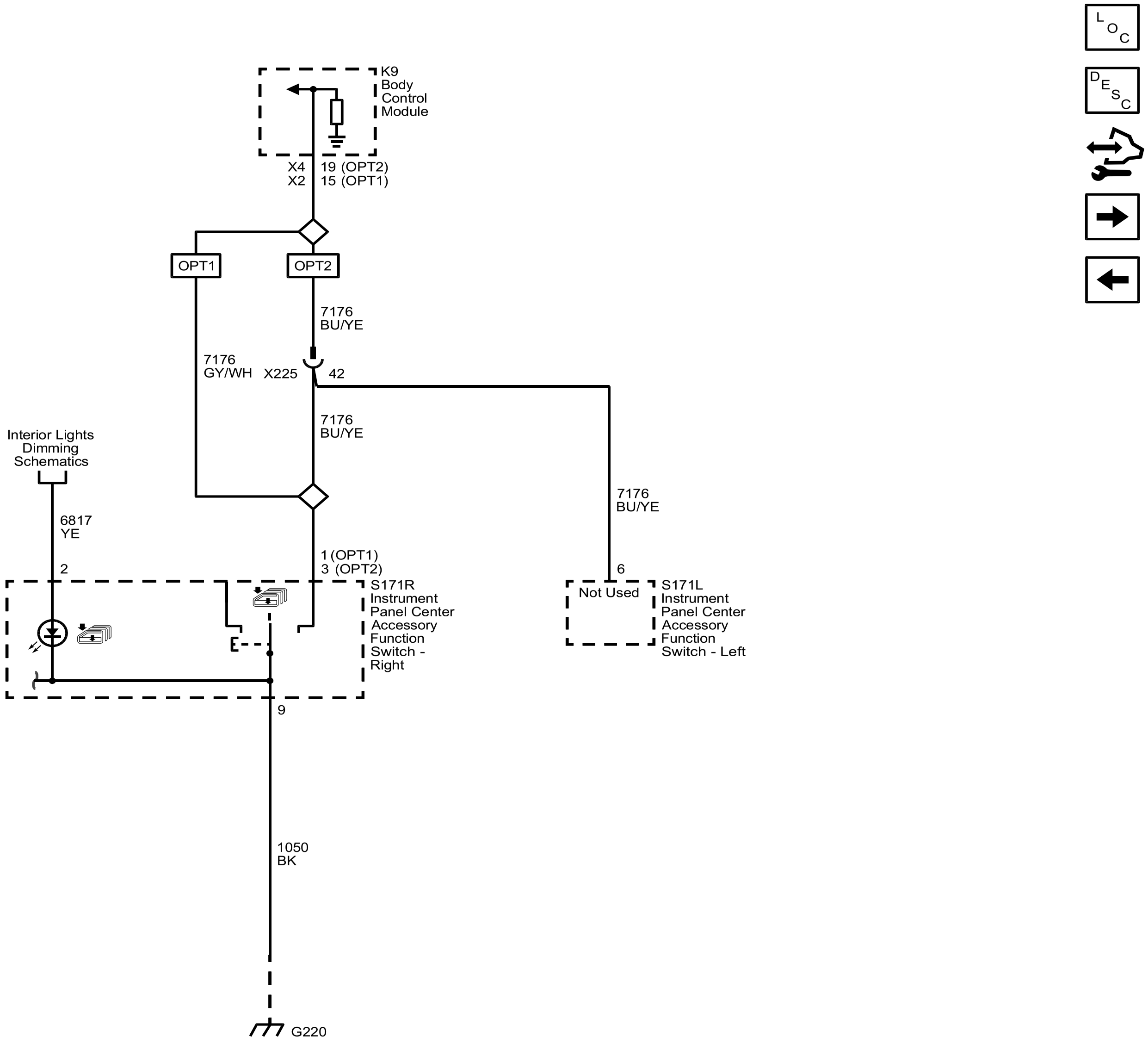

L O C
D E S C
B+
X51R
Fuse Block -
Instrument
Panel Right
F1DR
30A
F2DR
30A
X1
23
37
1842
RD/BU
1340
RD/WH
X700
1
X800
1
S146
Window/
Outside
Rearview
Mirror
Switch -
Driver
A90
Logic
K9
Body
Control
Module
6135
GN/GY
1340
RD/WH
1842
RD/BU
8
1
S79LR
Window
Switch -
Left Rear
S79RR
Window
Switch -
Right Rear
B+
A90
Logic
7
3
9
10
2
1150
BK
668
BU/VT
669
YE/BU
747
GN (EXTENDED CAB)
747
GY (CREW CAB)
748
GN
670
BU/GY
671
GN/BK
1250
BK
M74LR
Window
Motor -
Left Rear
M74RR
Window
Motor -
Right Rear
M
Door Lock/
Indicator
Schematics
G300
G320
4960834

## Moveable Window Schematics (Global Window Express Down Switch (WLD) (In Left IP Accessory Function Switch))


K9
Body
Control
Module
X4
19
7176
BU/YE
X225
42
7176
BU/YE
Interior Lights Dimming
Schematics
6817
YE
2
6
S171L
Instrument
Panel Center
Accessory
Function
Switch - Left
9
7176
BU/YE
3
Not Used
S171R
Instrument
Panel Center
Accessory
Function
Switch -
Right
1050
BK
G220

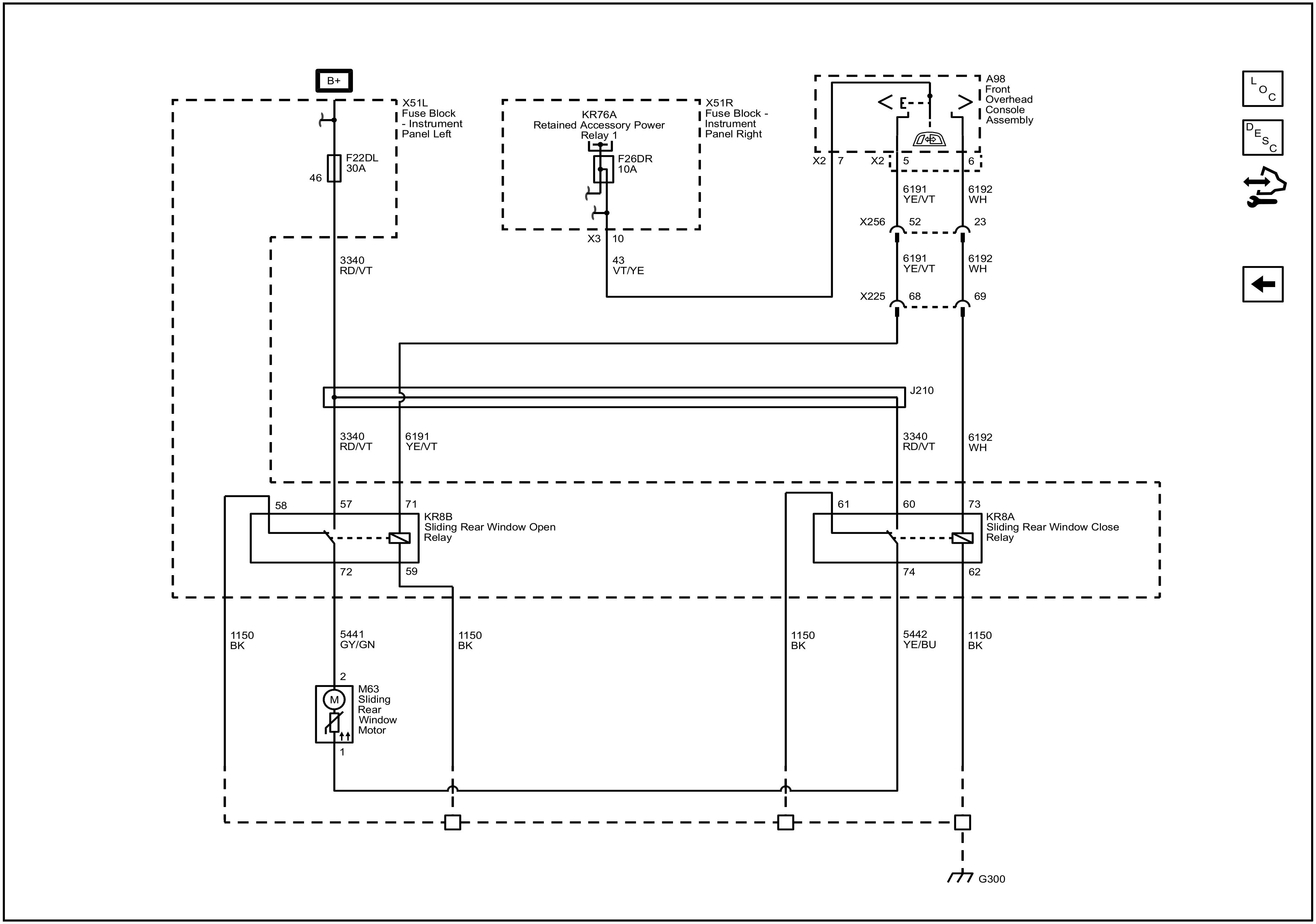
5153382

## Moveable Window Schematics (Global Window Express Down Switch (WLD) (In Right IP Accessory Function Switch))

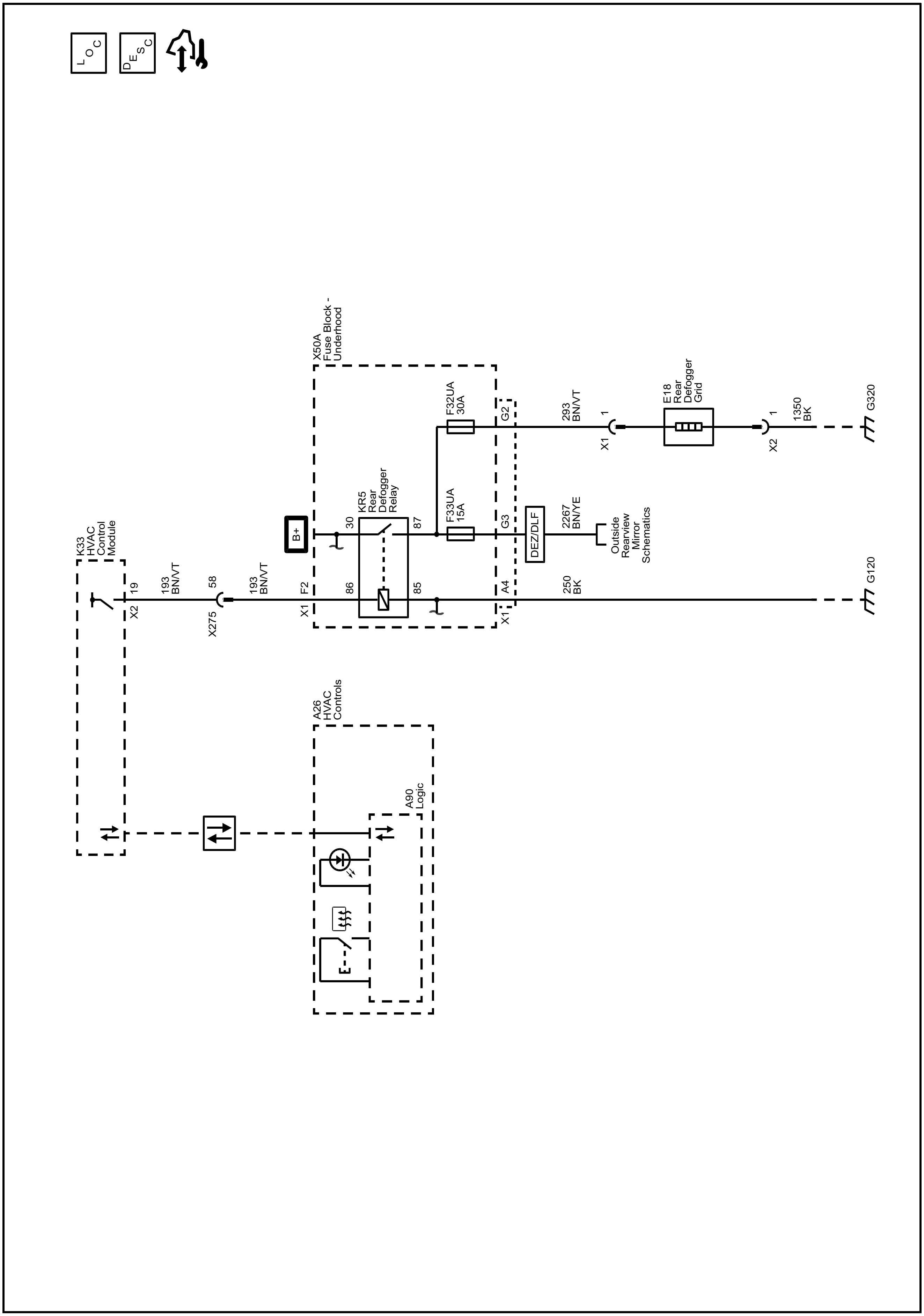

K9
Body
Control
Module
X4 19 (OPT2)
X2 15 (OPT1)
OPT1
OPT2
7176
BU/YE
7176
GY/WH
X225
42
7176
BU/YE
Interior Lights
Dimming
Schematics
6817
YE
2
1 (OPT1)
3 (OPT2)
S171R
Instrument
Panel Center
Accessory
Function
Switch -
Right
9
7176
BU/YE
6
Not Used
S171L
Instrument
Panel Center
Accessory
Function
Switch - Left
1050
BK
G220
L O C
D E S C

5070129

## Moveable Window Schematics (Rear Sliding Window (A48))


B+
X51L
Fuse Block
- Instrument
Panel Left
F22DL
30A
46
3340
RD/VT
KR76A
Retained Accessory Power
Relay 1
F26DR
10A
X51R
Fuse Block -
Instrument
Panel Right
X3
10
43
VT/YE
A98
Front
Overhead
Console
Assembly
X2
7
X2
5
6
6191
YE/VT
6192
WH
X256
52
23
6191
YE/VT
6192
WH
X225
68
69
J210
3340
RD/VT
6191
YE/VT
3340
RD/VT
6192
WH
58
57
71
KR8B
Sliding Rear Window Open
Relay
72
59
61
60
73
KR8A
Sliding Rear Window Close
Relay
74
62
1150
BK
5441
GY/GN
1150
BK
1150
BK
5442
YE/BU
1150
BK
2
M
M63
Sliding
Rear
Window
Motor
1
G300
L O C
D E S C
4960836

## Defogger Schematics (Defogger)


4978057
LOC
DESC
K33
HVAC
Control
Module
X2 19
193
BN/VT
X275 58
193
BN/VT
X1 F2
X50A
Fuse Block -
Underhood
B+
30
KR5
Rear
Defogger
Relay
87
86
85
F32UA
30A
F33UA
15A
G2
G3
A4
X1
DEZ/DLF
293
BN/VT
2267
BN/YE
Outside
Rearview
Mirror
Schematics
250
BK
X1 1
E18
Rear
Defogger
Grid
X2 1
1350
BK
G320
G120
A26
HVAC
Controls
A90
Logic

# Description and Operation

## Power Windows Description and Operation

### Power Windows System Components

The power window system consists of the following components:

- Driver window switch
- Passenger window switch
- Left rear window switch
- Right rear window switch
- Global express down window switch
- Window motors in each of the doors
- 30A Fuse
- Body control module (BCM)

### Power Window System

This vehicle may be equipped with the following power window configurations:

- Driver door with express up and express down window motor
- Passenger door with express up and express down window motor
- Passenger door with express down only window motor
- Left rear door with express down only window motor
- Right rear door with express down only window motor

### Driver and Passenger Express Up and Express Down Power Window Motors

The driver and passenger doors contains a window motor is smart motor that will detect excessive resistance while performing the express up function and automatically reverse direction to prevent injury to any occupants that may become trapped between the closing window and the door frame. The automatic reverse safety feature can be overridden by pulling and holding the window switch.

The logic circuit within the window motor monitors the up, down and express signal circuits which are normally equal to B+ voltage. When a switch is used on the window switch, the contacts close causing a voltage drop within the appropriate signal circuit. The window motor will detect the voltage drop and will command the window to move in the direction requested.

The driver window switch communicates to the BCM by a serial data circuit. When the driver wishes to control the passenger window, the driver will use the appropriate switch on the driver window switch. When this switch is used, a serial data message is sent to the BCM requesting the passenger window motor command, the BCM will then send a serial data message to the passenger window motor which will then move in the direction requested.

### Passenger, Left Rear and Right Rear Express Down Only Window Motors

For the passenger, right rear and left rear doors, when their window switch is pressed in the down position, battery positive voltage is applied to their respective window motor control circuit and ground to the other window motor control circuit causing that window to open. When the individual window switch is pulled in the up position, voltage and ground is applied to the window motor in the opposite direction causing that window to close. The return path to ground is supplied through the inactive control circuit being normally grounded through the window switch.

The passenger and rear window switches communicates to the BCM by a serial data circuit. When the driver wishes to control the passenger, left rear or right rear window, the driver will use the appropriate switch on the driver window switch. When this switch is used, a serial data message is sent to the BCM requesting a window motor command, the BCM will then send a serial data message to the appropriate door window switch which will then command that window to move in the direction requested.

### Global Window Express Down Switch

The global express down switch (part of the instrument panel multifunction switch) may be used to commanded all windows to perform the express down function

### Lockout Switch Feature

The driver window switch contains a window lockout switch, when the driver presses the window lockout switch, a serial data message is sent to the BCM which will send a disable command to the rear window switches, deactivating them. The rear windows will still function normally from the switches on the driver window switch.

### Power Sliding Rear Window

NOTE: Power window lockout switch disables left rear and right rear passenger window switches only and has no effect on the operation of the power sliding window switch.

The power sliding rear window motor is controlled from the rear window OPEN/CLOSE switch through OPEN and CLOSE relays. The OPEN/CLOSE switch is supplied voltage from the body control module accessory voltage output circuit. When the switch is pressed in the OPEN or CLOSED position the OPEN or CLOSED relay coil will be supplied accessory voltage and energized through the appropriate relay control circuit. While the OPEN and CLOSE relays are in a de-energized state both motor control circuits will be closed to ground. When one of the relays is energized its motor control circuit will be closed to the battery voltage supply circuit and the other motor control circuit will remain grounded through the de-energized relay.

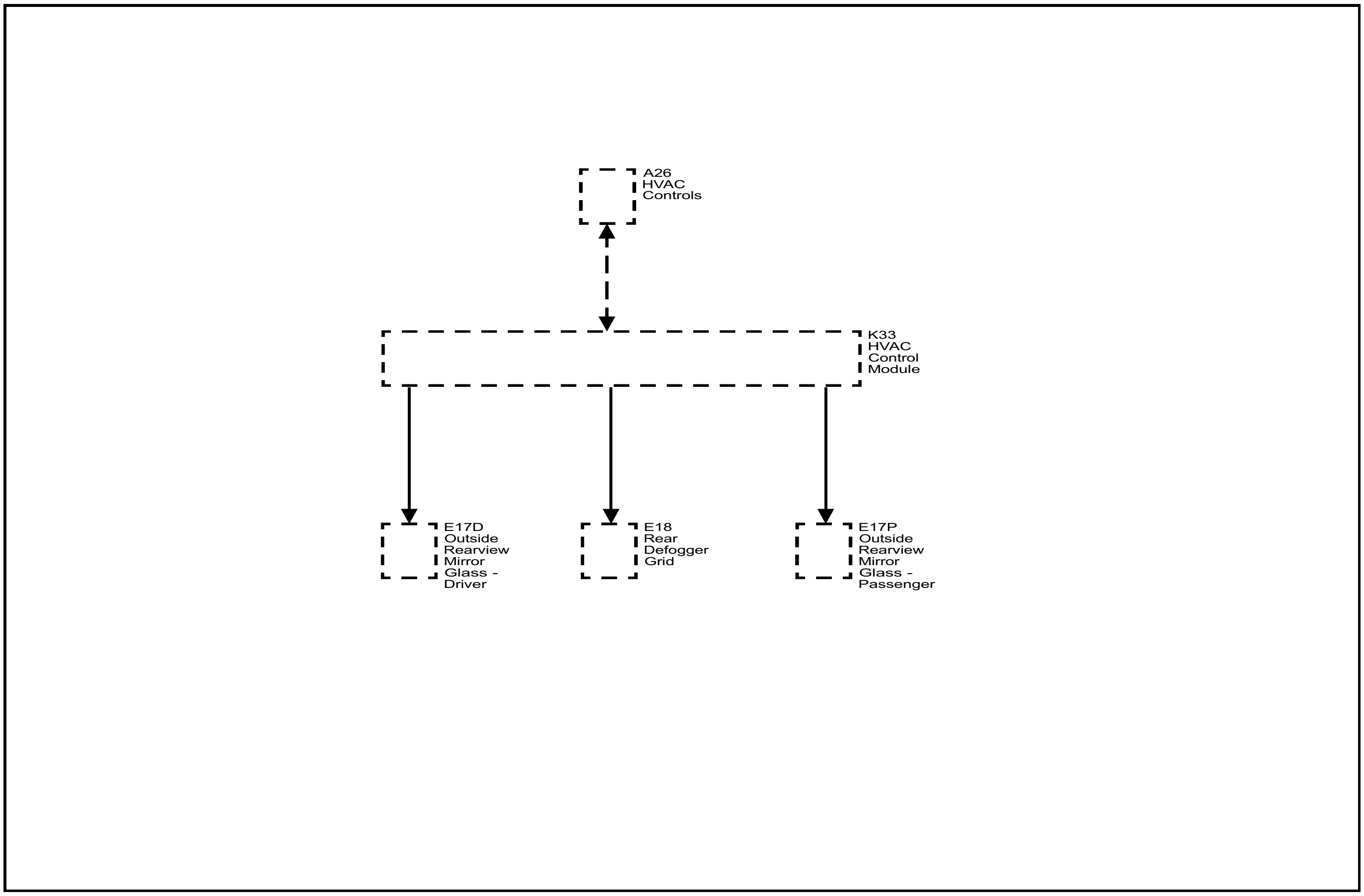
# Rear Window Defogger Description and Operation

## Rear Window Defogger System Components

The rear window defogger system consists of the following components:

- HVAC Control Module
- HVAC Controls
- Rear Defogger Relay
- Rear Defogger Grid
- Driver Outside Rearview Mirror
- Passenger Outside Rearview Mirror
- 40A Fuse

### A26-K33-X50A Defogger Block Diagram



3511665

## Rear Window Defogger Operation

The rear defog control system utilizes a single zone backlight design, driven with a single relay configuration. Additionally, up to two outside rear view mirrors can be heated if required. A switch for the customer to control the system is provided within the HVAC controls. Also included in the HVAC controls is an indicator to inform the customer with the current state of the system. The system is only operational when engine is running or during remote start.

Pressing the heated rear window switch causes the HVAC controls to send a serial data message to the HVAC control module requesting rear window defog operation. The HVAC control module upon receipt of the serial data message will provide voltage to the coil side of the rear defogger relay, this will energize the relay causing the relay switch contacts to close allowing B+ voltage to flow through the rear defogger grid control circuit to the rear defogger grid.

When the rear heated rear window switch is pressed and the engine is running, the rear window defogger grid will activate and will turn off automatically depending upon the vehicle speed (refer to owner’s manual for rear window defogger operation cycles)

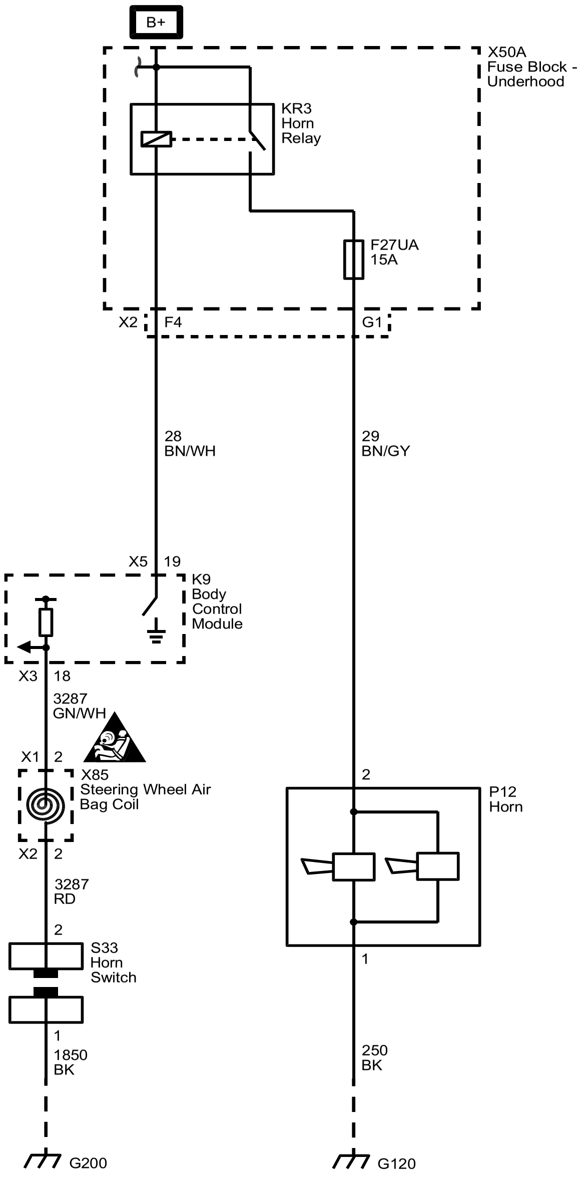
## Heated Mirrors

The heated mirrors are also controlled through the rear defogger relay. Whenever the rear window defogger is turned on battery voltage is supplied to the mirror heater elements through the left and right mirror heater element control circuits.

# Horns and Pedestrian Alerts

## Schematic and Routing Diagrams

## Horn Schematics (Horn)


B+
X50A
Fuse Block -
Underhood
KR3
Horn
Relay
F27UA
15A
X2
F4
G1
28
BN/WH
29
BN/GY
X5
19
K9
Body
Control
Module
X3
18
3287
GN/WH
X1
2
X85
Steering Wheel Air
Bag Coil
X2
2
3287
RD
2
S33
Horn
Switch
1
1850
BK
G200
2
P12
Horn
1
250
BK
G120

4978058

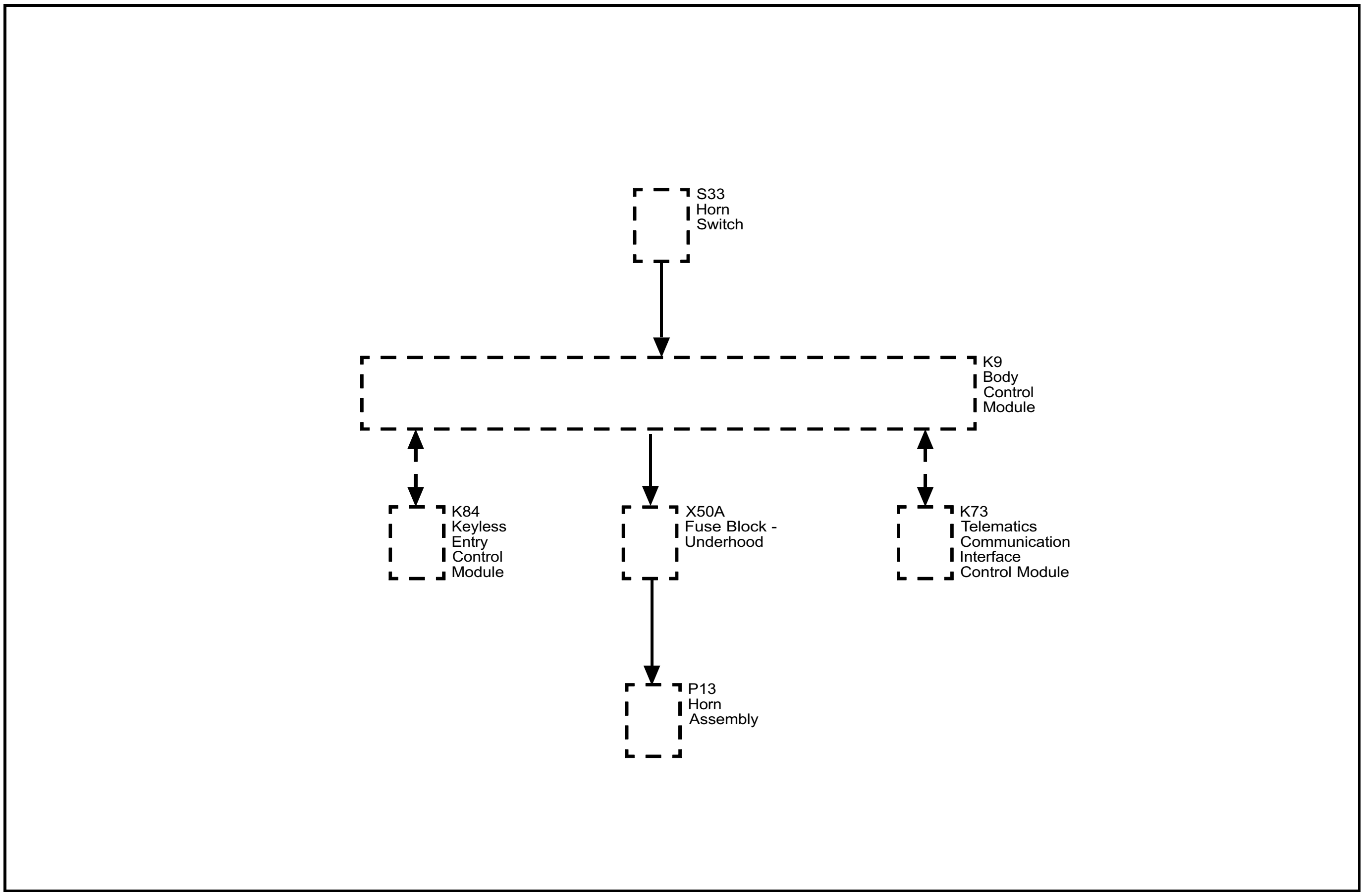
# Description and Operation

## Horns System Description and Operation

### System Description

The horn system consists of the following components:

- HORN fuse
- Underhood fuse block (Contains PCB horn relay)
- Horn switch
- Horn assembly
- Body control module (BCM)



3270443

### System Operation

The vehicle horn system is activated under the following conditions:

- When the horn switch is depressed
- The BCM commands the horns ON under any of the following conditions:
  - When the content theft deterrent system detects a vehicle intrusion—For further information refer to Theft Systems Description and Operation.
  - When the panic button is depressed on the remote control door lock transmitter—For further information refer to Keyless Entry System Description and Operation.
  - When the keyless entry system is used to lock the vehicle, a horn chirp may sound to notify the driver that the vehicle has been locked. The notification feature may be enabled or disabled through personalization. For further information refer to Keyless Entry System Description and Operation.
  - When the OnStar® system is used to sound the horns if equipped—For further information, refer to OnStar Description and Operation.

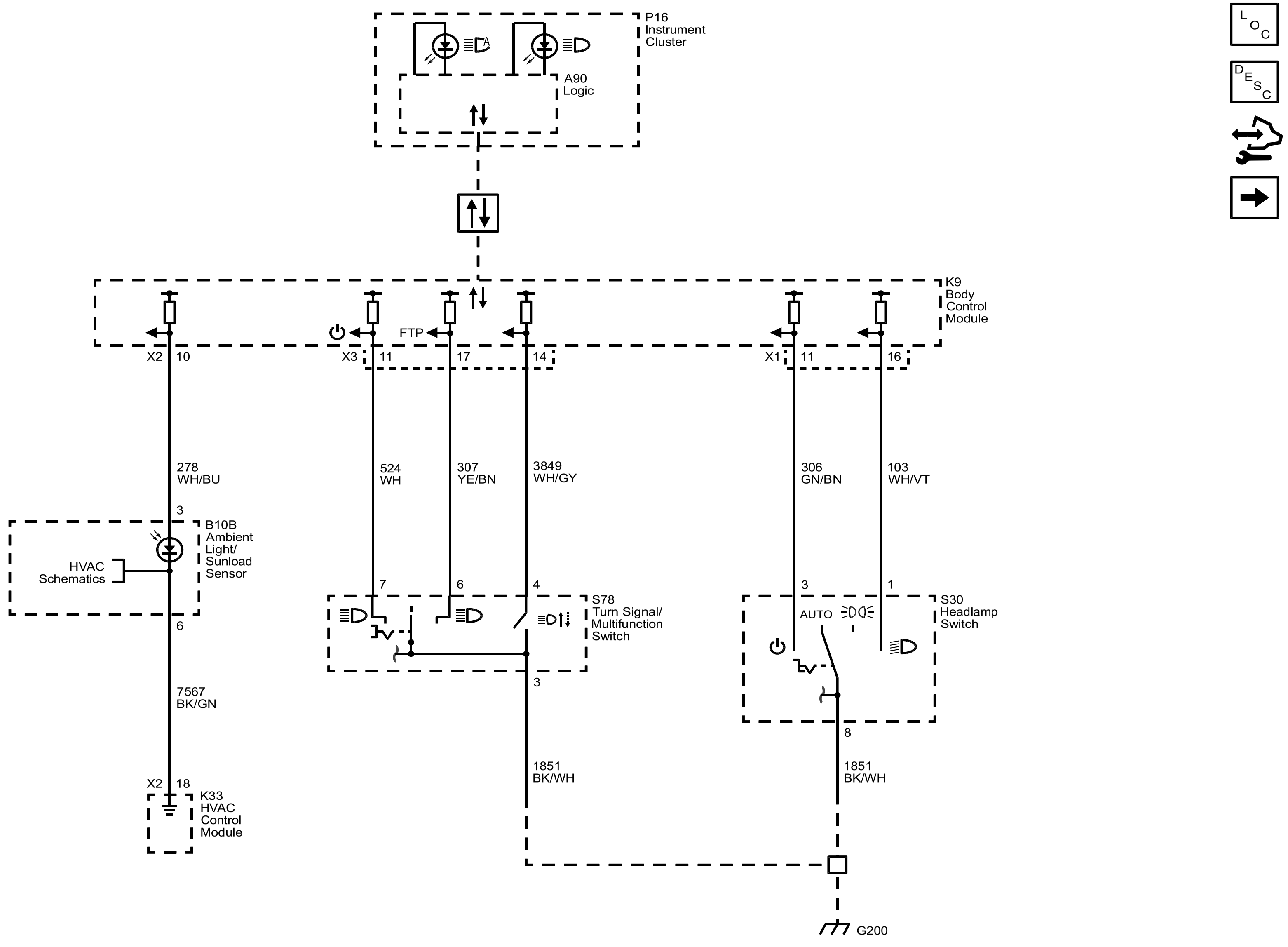
### Circuit Operation

Battery positive voltage is applied at all times to the horn relay coil and the horn relay switch. Pressing either of the horn switches applies ground to the horn relay control circuit. The BCM may also apply ground to the horn relay control circuit as described above. When the horn relay control circuit is grounded, the horn relay is energized and battery positive voltage is applied to the horns through the horn control circuit. The horns sound as long as ground is applied to the horn relay control circuit.

# Lighting

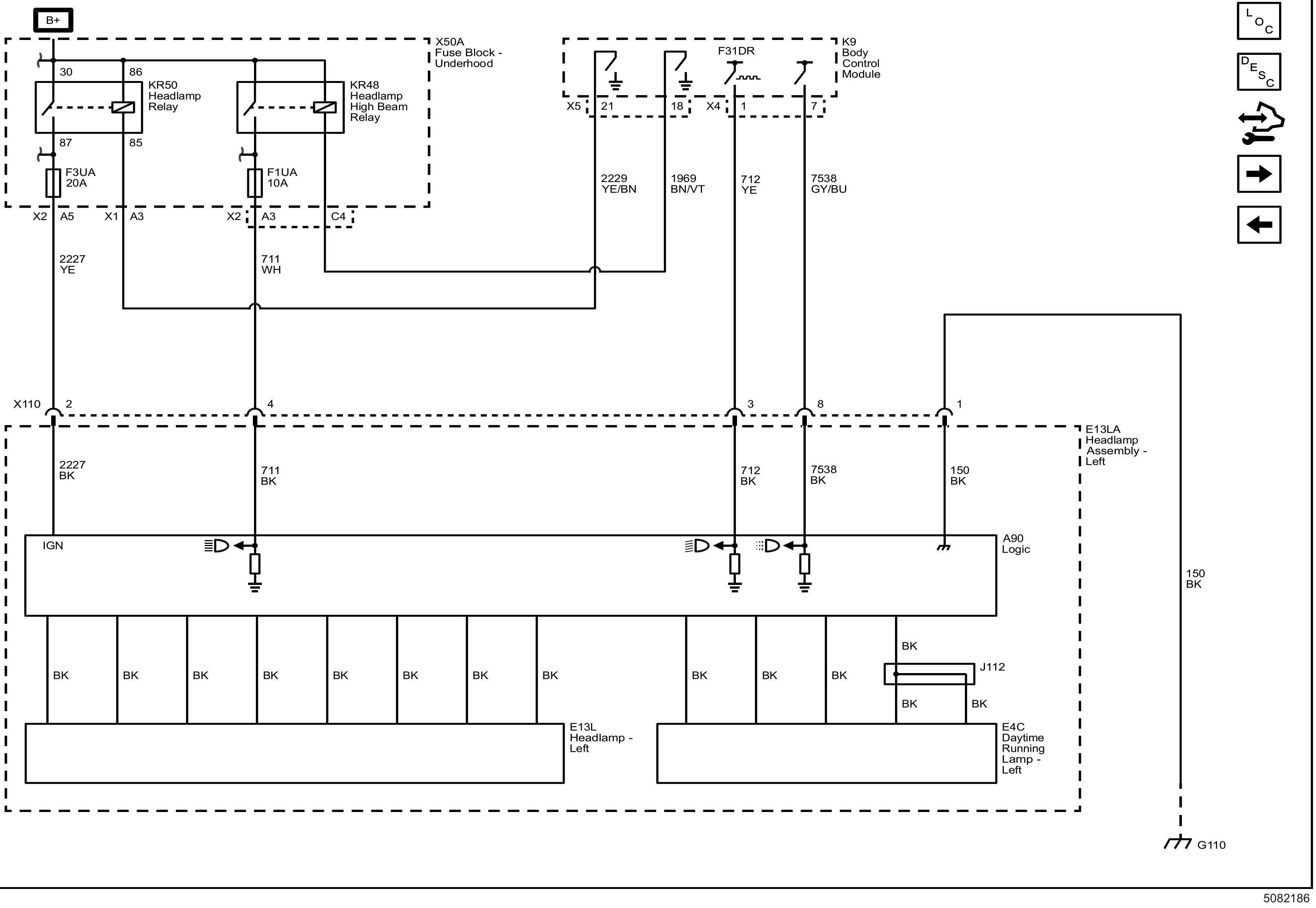
## Schematic and Routing Diagrams

## Headlights/Daytime Running Lights (DRL) Schematics (Controls and Indicators)

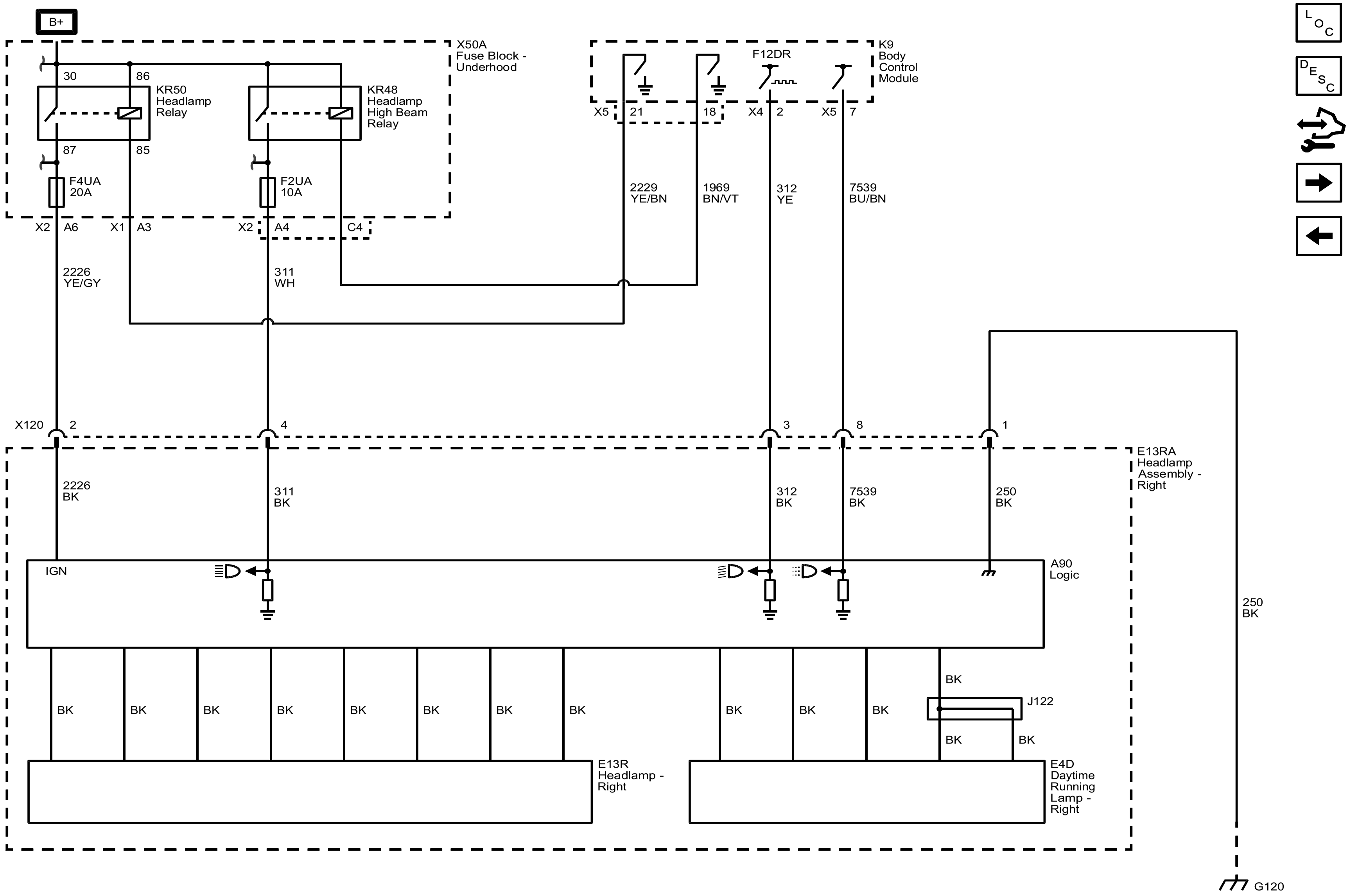

P16
Instrument
Cluster
A90
Logic
K9
Body
Control
Module
FTP
X2 10
X3 11
17
14
X1 11
16
278
WH/BU
524
WH
307
YE/BN
3849
WH/GY
306
GN/BN
103
WH/VT
3
B10B
Ambient
Light/
Sunload
Sensor
HVAC
Schematics
6
7567
BK/GN
X2 18
K33
HVAC
Control
Module
7
6
4
S78
Turn Signal/
Multifunction
Switch
3
1851
BK/WH
3
1
S30
Headlamp
Switch
AUTO
8
1851
BK/WH
G200

5082184

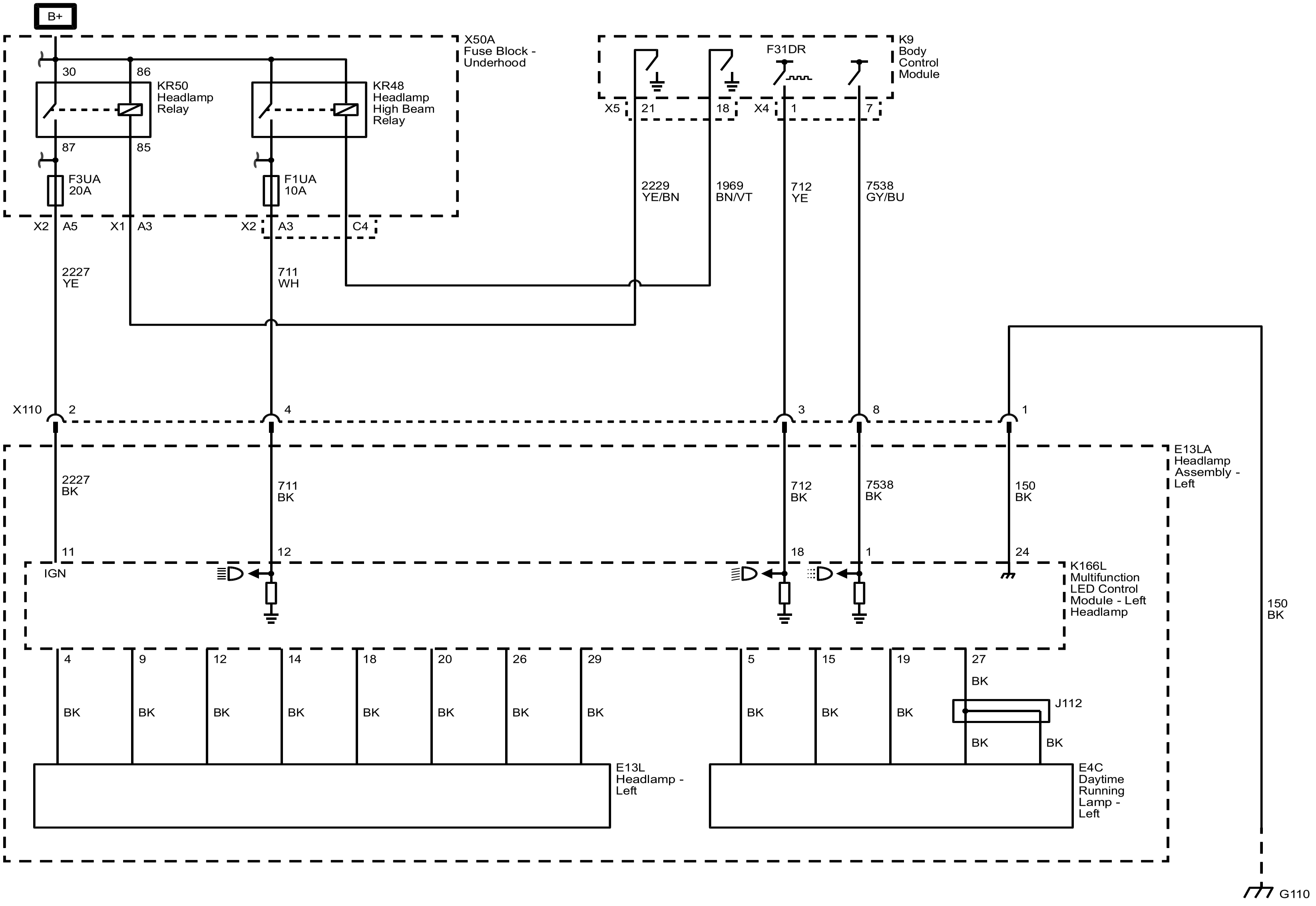
## Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Left (GFF/GFI/GFJ))


B+
X50A Fuse Block - Underhood
30
86
KR50 Headlamp Relay
87
85
KR48 Headlamp High Beam Relay
F3UA 20A
F1UA 10A
X2 A5
X1 A3
X2 A3
C4
2227 YE
711 WH
K9 Body Control Module
F31DR
X5 21
18
X4 1
7
2229 YE/BN
1969 BN/VT
712 YE
7538 GY/BU
X110 2
4
3
8
1
E13LA Headlamp Assembly - Left
2227 BK
711 BK
712 BK
7538 BK
150 BK
IGN
A90 Logic
150 BK
BK
J112
E13L Headlamp - Left
E4C Daytime Running Lamp - Left
G110
5082186

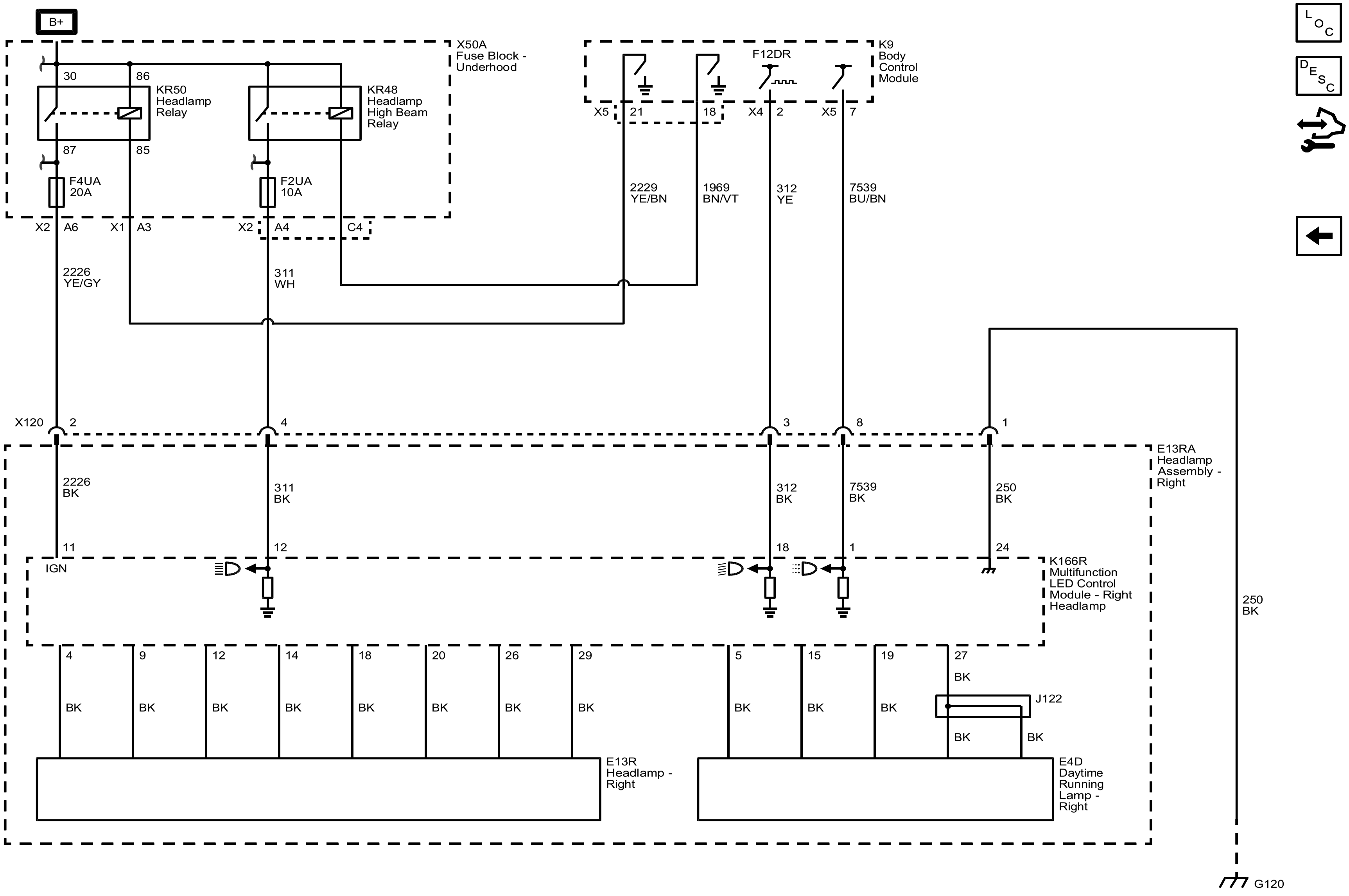
## Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Right (GFF/GFI/GFJ))


B+
X50A Fuse Block - Underhood
30
86
KR50 Headlamp Relay
87
85
KR48 Headlamp High Beam Relay
F4UA 20A
F2UA 10A
X2 A6
X1 A3
X2 A4
C4
2226 YE/GY
311 WH
K9 Body Control Module
F12DR
X5 21
18
X4 2
X5 7
2229 YE/BN
1969 BN/VT
312 YE
7539 BU/BN
X120 2
4
3
8
1
E13RA Headlamp Assembly - Right
2226 BK
311 BK
312 BK
7539 BK
250 BK
IGN
A90 Logic
250 BK
BK
J122
E13R Headlamp - Right
E4D Daytime Running Lamp - Right
G120
5082187

## Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Left (GFG/GFU/GFW))

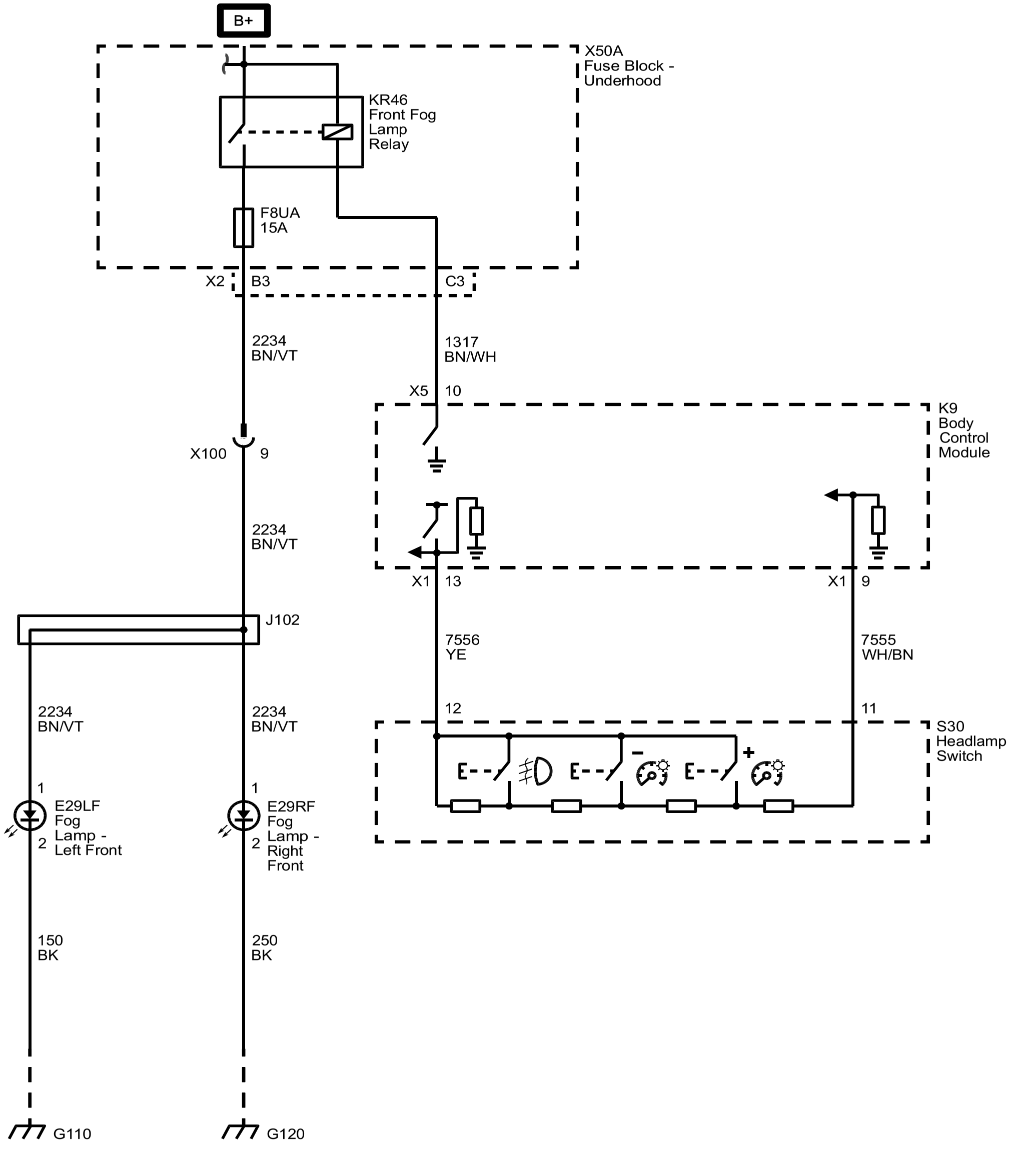

B+
X50A Fuse Block - Underhood
30
86
KR50 Headlamp Relay
87
85
F3UA 20A
KR48 Headlamp High Beam Relay
F1UA 10A
X2
A5
X1
A3
X2
A3
C4
K9 Body Control Module
F31DR
X5
21
18
X4
1
7
2229 YE/BN
1969 BN/VT
712 YE
7538 GY/BU
2227 YE
711 WH
X110
2
4
3
8
1
E13LA Headlamp Assembly - Left
2227 BK
711 BK
712 BK
7538 BK
150 BK
11
12
18
1
24
IGN
K166L Multifunction LED Control Module - Left Headlamp
150 BK
4
9
12
14
18
20
26
29
5
15
19
27
BK
J112
E13L Headlamp - Left
E4C Daytime Running Lamp - Left
G110
5082188

## Headlights/Daytime Running Lights (DRL) Schematics (Headlamps and Daytime Running Lamps - Right (GFG/GFU/GFW))


B+
30
86
87
85
KR50
Headlamp
Relay
KR48
Headlamp
High Beam
Relay
F4UA
20A
F2UA
10A
X50A
Fuse Block -
Underhood
X2
A6
X1
A3
X2
A4
C4
2226
YE/GY
311
WH
K9
Body
Control
Module
F12DR
X5
21
18
X4
2
X5
7
2229
YE/BN
1969
BN/VT
312
YE
7539
BU/BN
X120
2
4
3
8
1
E13RA
Headlamp
Assembly -
Right
2226
BK
311
BK
312
BK
7539
BK
250
BK
11
12
18
1
24
IGN
K166R
Multifunction
LED Control
Module - Right
Headlamp
4
9
12
14
18
20
26
29
5
15
19
27
BK
J122
E13R
Headlamp -
Right
E4D
Daytime
Running
Lamp -
Right
250
BK
G120
L O C
D E S C

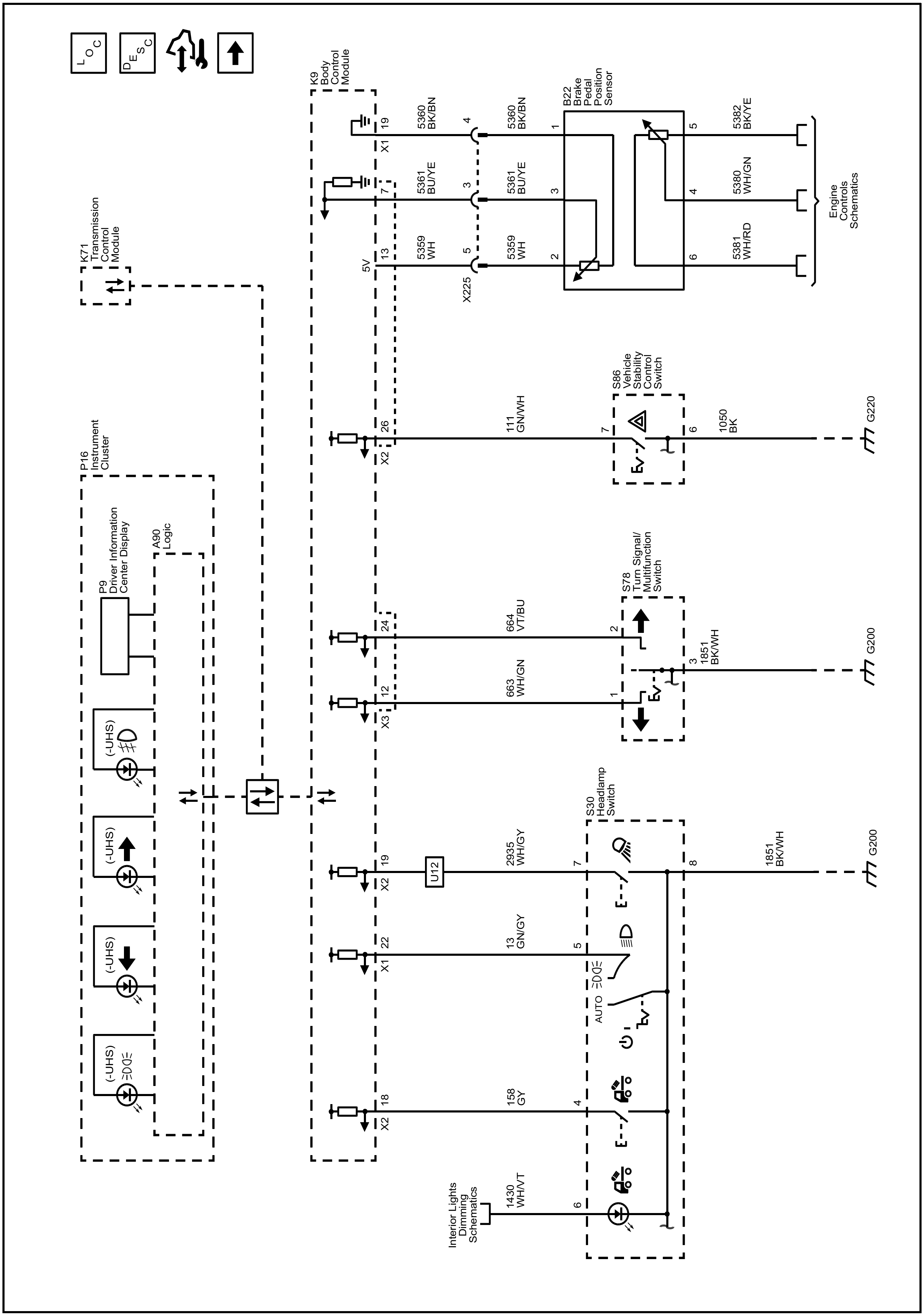
5082189

## Fog Lights Schematics (Fog Lamps (T3U))


B+
X50A
Fuse Block - Underhood
KR46
Front Fog Lamp Relay
F8UA
15A
X2
B3
C3
2234
BN/VT
1317
BN/WH
X5
10
K9
Body Control Module
X100
9
2234
BN/VT
X1
13
X1
9
J102
7556
YE
7555
WH/BN
2234
BN/VT
2234
BN/VT
12
11
S30
Headlamp Switch
−
+
1
E29LF
Fog Lamp - Left Front
2
1
E29RF
Fog Lamp - Right Front
2
150
BK
250
BK
G110
G120

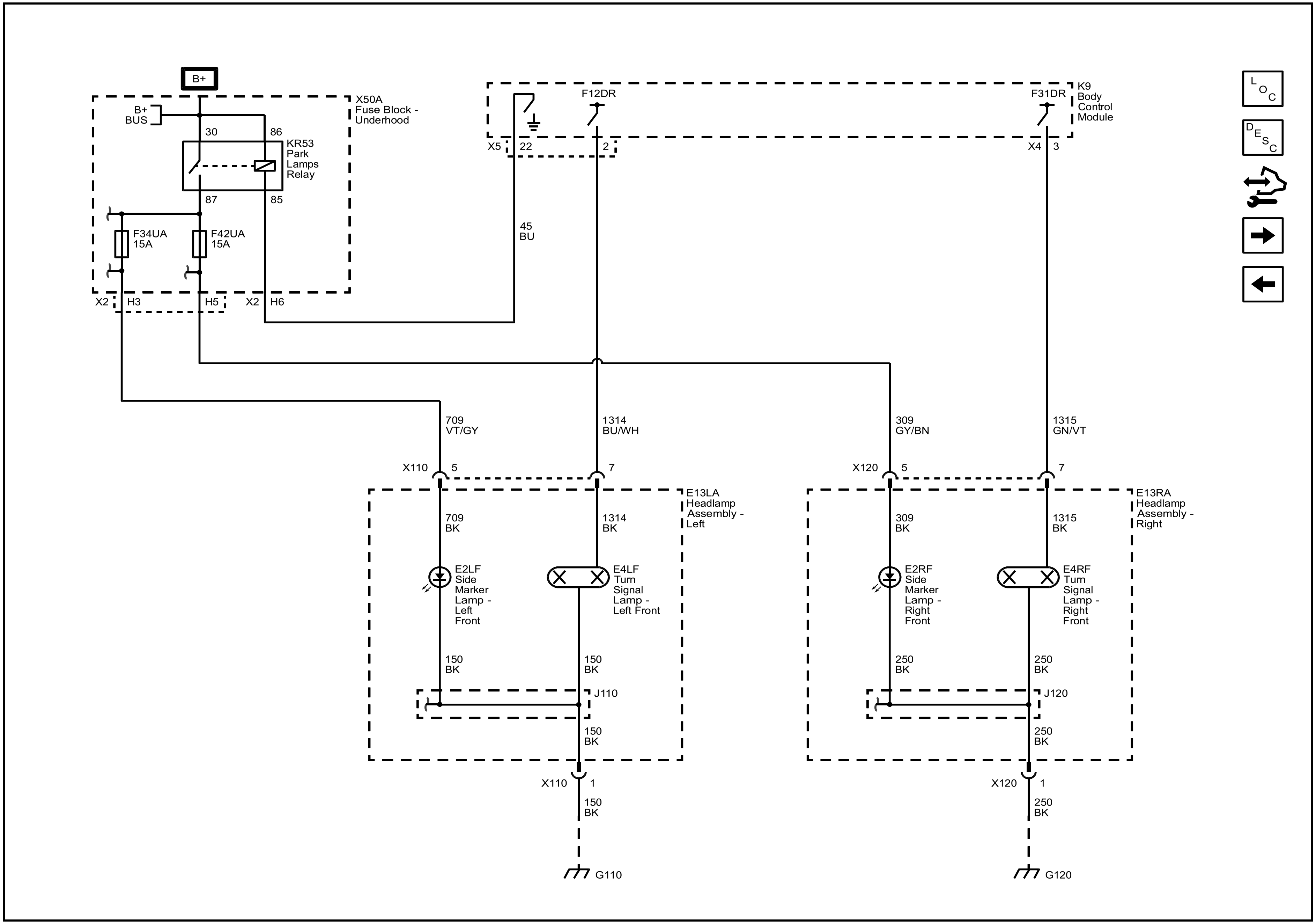
4978061

## Exterior Lights Schematics (Controls and Indicators)


L O C
D E S C
K71 Transmission Control Module
P16 Instrument Cluster
P9 Driver Information Center Display
A90 Logic
(-UHS)
(-UHS)
(-UHS)
(-UHS)
K9 Body Control Module
X1
19
5360 BK/BN
4
5360 BK/BN
1
B22 Brake Pedal Position Sensor
5
5382 BK/YE
7
5361 BU/YE
3
5361 BU/YE
3
4
5380 WH/GN
5V
13
5359 WH
5
X225
5359 WH
2
6
5381 WH/RD
Engine Controls Schematics
X2
26
111 GN/WH
7
S86 Vehicle Stability Control Switch
6
1050 BK
G220
24
664 VT/BU
2
S78 Turn Signal/ Multifunction Switch
3
1851 BK/WH
G200
X3
12
663 WH/GN
1
X2
19
U12
2935 WH/GY
7
S30 Headlamp Switch
8
1851 BK/WH
G200
X1
22
13 GN/GY
5
AUTO
X2
18
158 GY
4
Interior Lights Dimming Schematics
1430 WH/VT
6

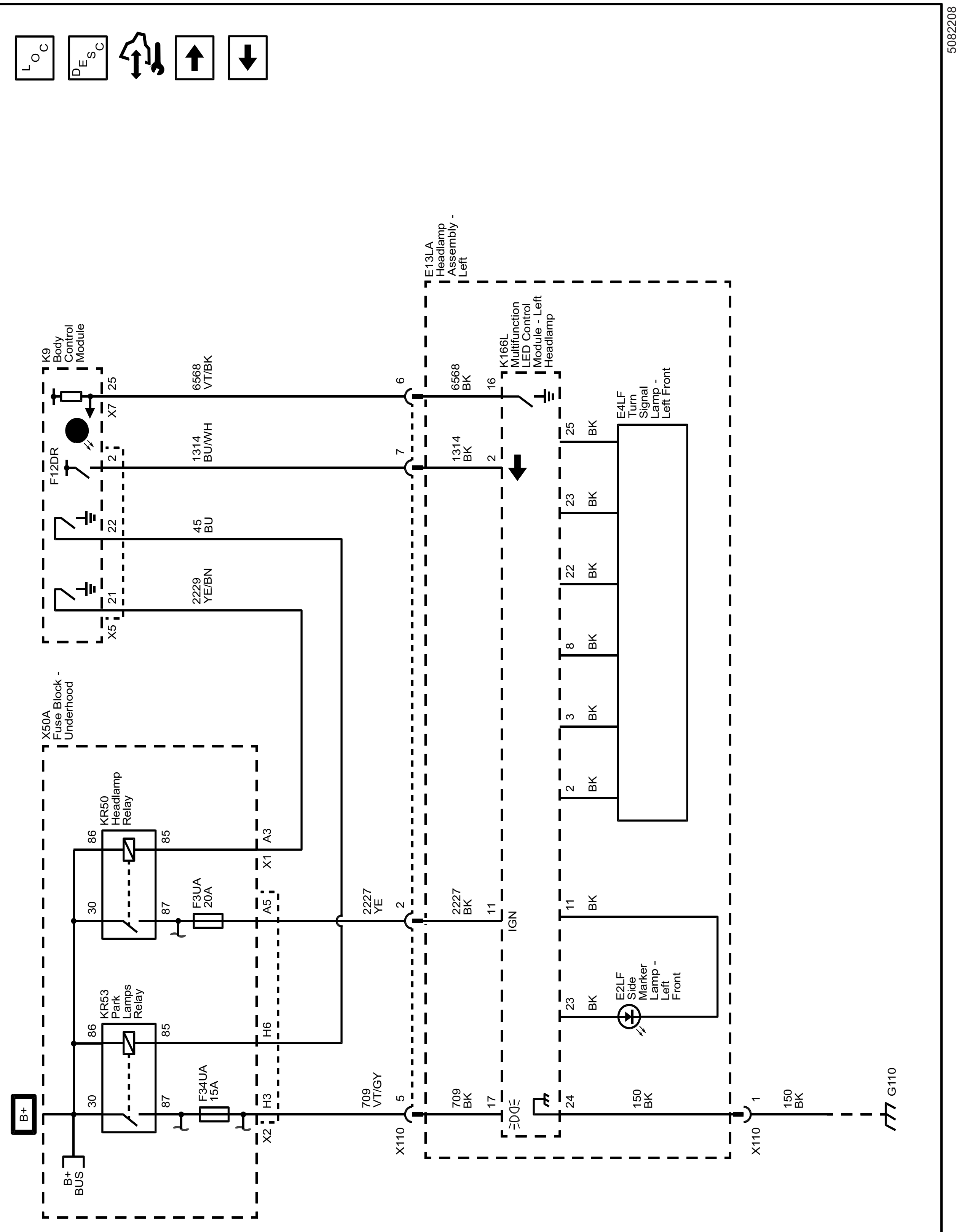
5082194

# Exterior Lights Schematics (Front Turn Signals and Side Marker Lamps (GFF/GFI/GFJ))


B+
B+ BUS
X50A Fuse Block - Underhood
30
86
KR53 Park Lamps Relay
87
85
F34UA 15A
F42UA 15A
X2 H3
H5
X2 H6
F12DR
F31DR
K9 Body Control Module
X5 22
2
X4 3
45 BU
709 VT/GY
1314 BU/WH
309 GY/BN
1315 GN/VT
X110 5
7
X120 5
7
E13LA Headlamp Assembly - Left
E13RA Headlamp Assembly - Right
709 BK
1314 BK
309 BK
1315 BK
E2LF Side Marker Lamp - Left Front
E4LF Turn Signal Lamp - Left Front
E2RF Side Marker Lamp - Right Front
E4RF Turn Signal Lamp - Right Front
150 BK
150 BK
250 BK
250 BK
J110
J120
150 BK
250 BK
X110 1
X120 1
150 BK
250 BK
G110
G120
L O C
D E S C

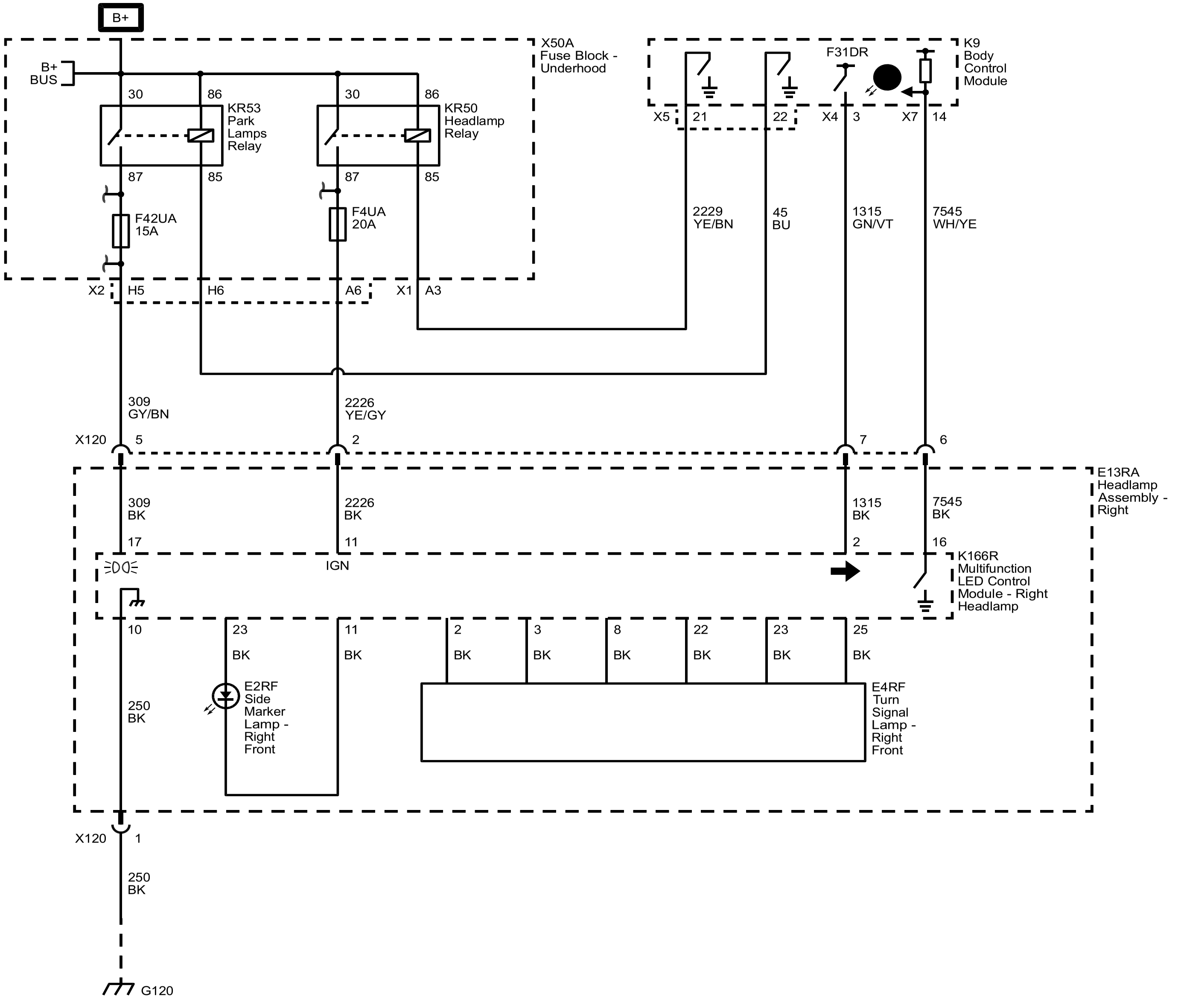
4978063

# Exterior Lights Schematics (Front Turn Signals and Side Marker Lamps - Left (GFG/GFU/GFW))



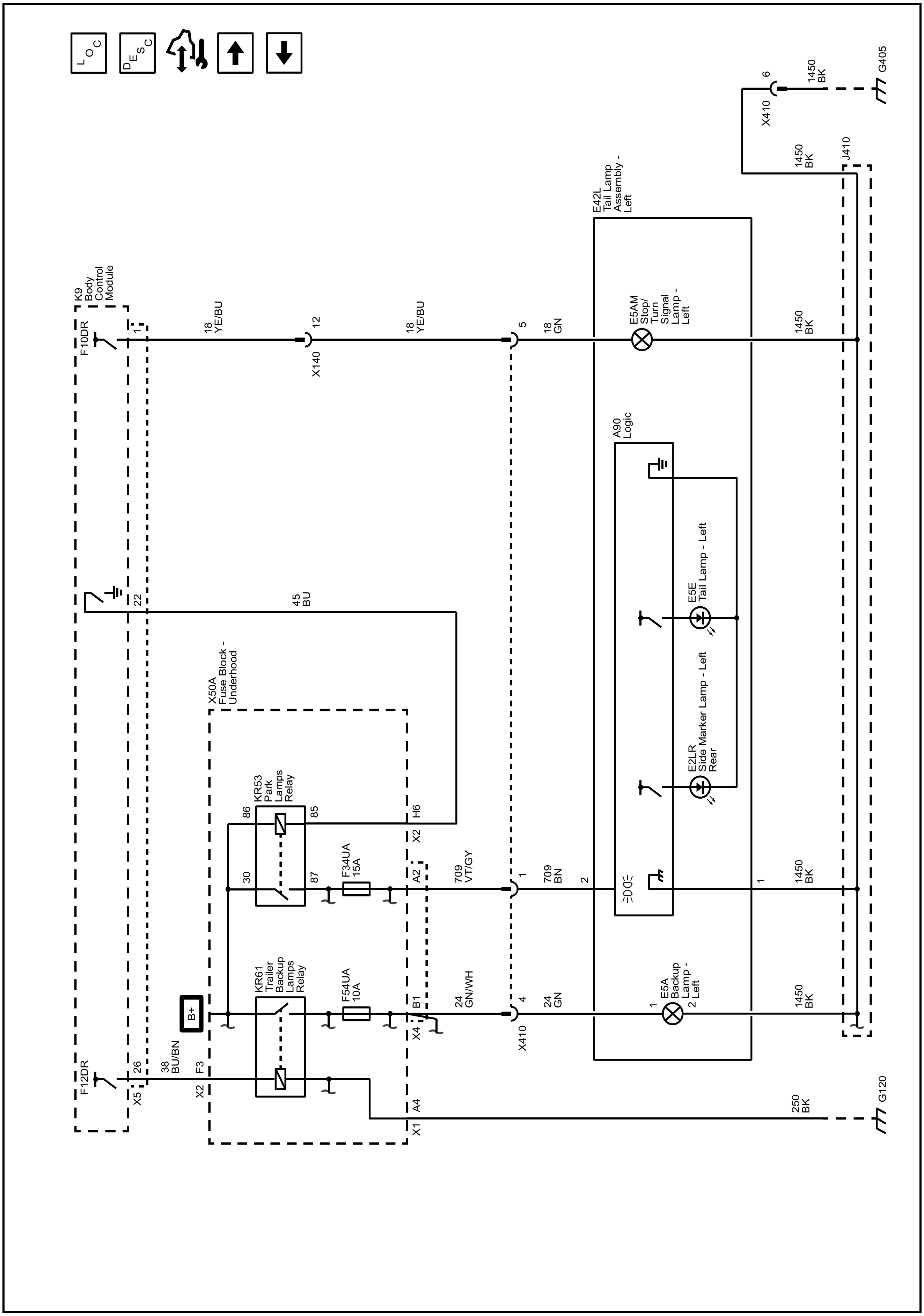
5082208
LOC
DESC
B+
B+ BUS
X50A Fuse Block - Underhood
KR53 Park Lamps Relay
KR50 Headlamp Relay
30
86
85
87
F34UA 15A
F3UA 20A
X2
H3
H6
A5
A3
X1
K9 Body Control Module
F12DR
X5
21
22
2
X7
25
2229 YE/BN
45 BU
1314 BU/WH
6568 VT/BK
2227 YE
709 VT/GY
X110
5
2
7
6
E13LA Headlamp Assembly - Left
K166L Multifunction LED Control Module - Left Headlamp
6568 BK
16
1314 BK
2
2227 BK
11
IGN
709 BK
17
24
E4LF Turn Signal Lamp - Left Front
25 BK
23 BK
22 BK
8 BK
3 BK
2 BK
11 BK
E2LF Side Marker Lamp - Left Front
23 BK
150 BK
1
G110

## Exterior Lights Schematics (Front Turn Signals and Side Marker Lamps - Right (GFG/GFU/GFW))

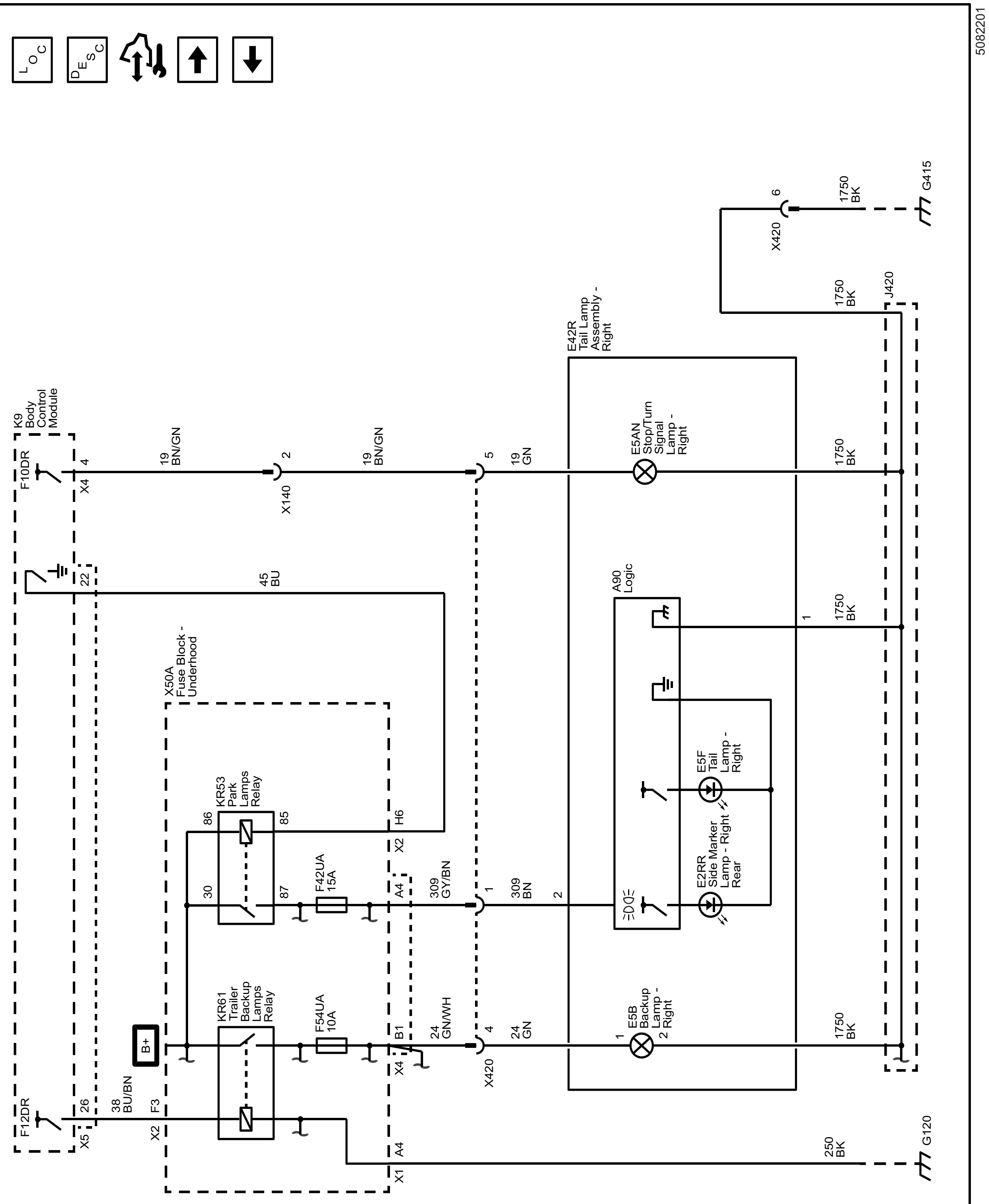

B+
B+ BUS
X50A Fuse Block - Underhood
30
86
KR53 Park Lamps Relay
87
85
F42UA 15A
30
86
KR50 Headlamp Relay
87
85
F4UA 20A
X2
H5
H6
A6
X1
A3
K9 Body Control Module
F31DR
X5
21
22
X4
3
X7
14
2229 YE/BN
45 BU
1315 GN/VT
7545 WH/YE
309 GY/BN
2226 YE/GY
X120
5
2
7
6
E13RA Headlamp Assembly - Right
309 BK
2226 BK
1315 BK
7545 BK
17
11
2
16
IGN
K166R Multifunction LED Control Module - Right Headlamp
10
23
BK
11
BK
2
BK
3
BK
8
BK
22
BK
23
BK
25
BK
E2RF Side Marker Lamp - Right Front
E4RF Turn Signal Lamp - Right Front
250 BK
X120
1
250 BK
G120

5082209

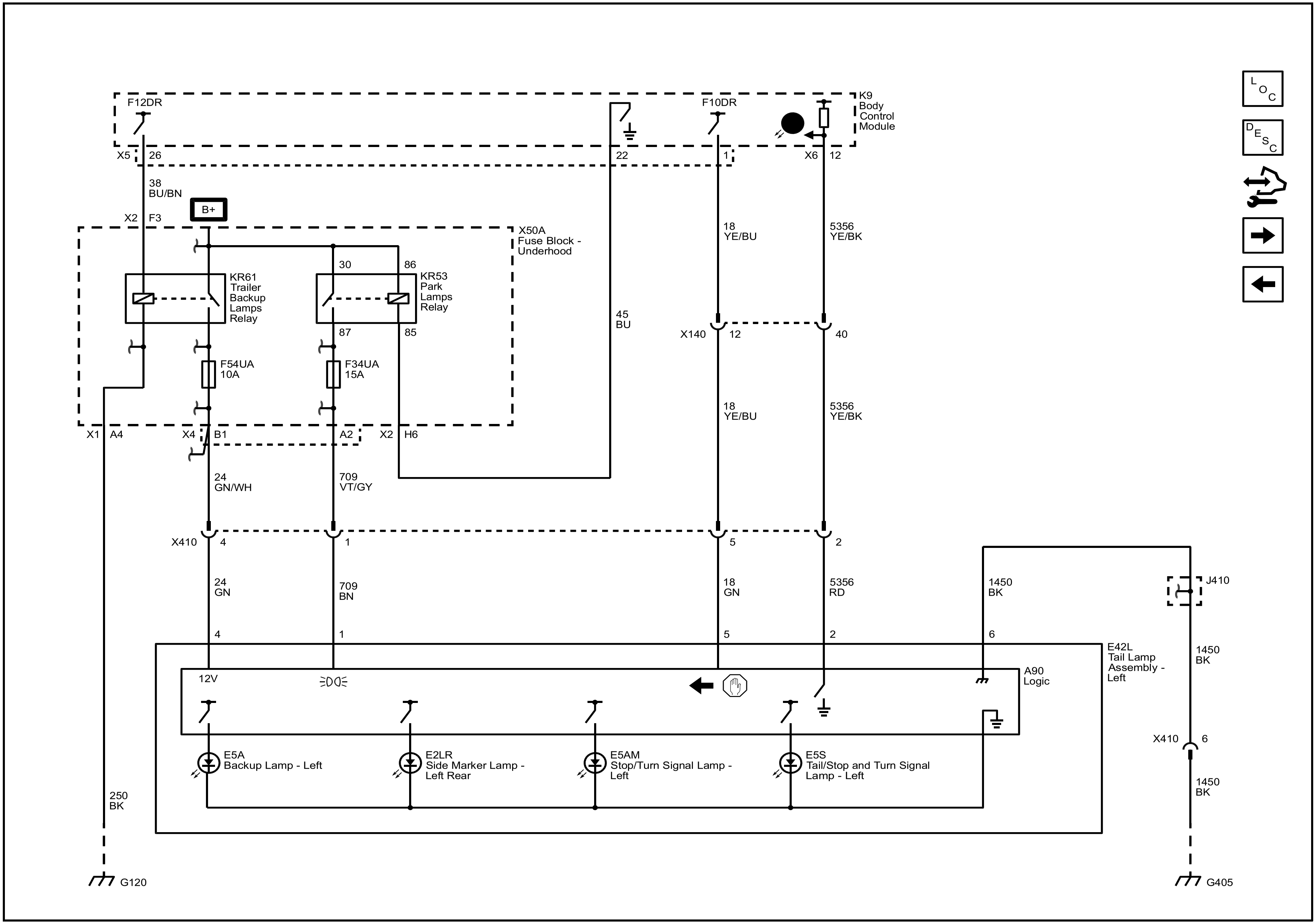
# Exterior Lights Schematics (Tail Lamp Assembly - Left (GFF/GFI/GFJ))


LOC
DESC
5082200
K9 Body Control Module
F10DR
F12DR
22
1
26
X5
18 YE/BU
12
X140
5
18 GN
45 BU
38 BU/BN
F3
X2
B+
X50A Fuse Block - Underhood
KR53 Park Lamps Relay
86
85
30
87
H6
X2
F34UA 15A
A2
709 VT/GY
KR61 Trailer Backup Lamps Relay
F54UA 10A
B1
X4
24 GN/WH
A4
X1
4
X410
1
709 BN
2
24 GN
E42L Tail Lamp Assembly - Left
E5AM Stop/ Turn Signal Lamp - Left
A90 Logic
E5E Tail Lamp - Left
E2LR Side Marker Lamp - Left Rear
E5A Backup Lamp - Left
1
2
1
1450 BK
1450 BK
1450 BK
1450 BK
J410
1450 BK
X410
6
1450 BK
G405
250 BK
G120

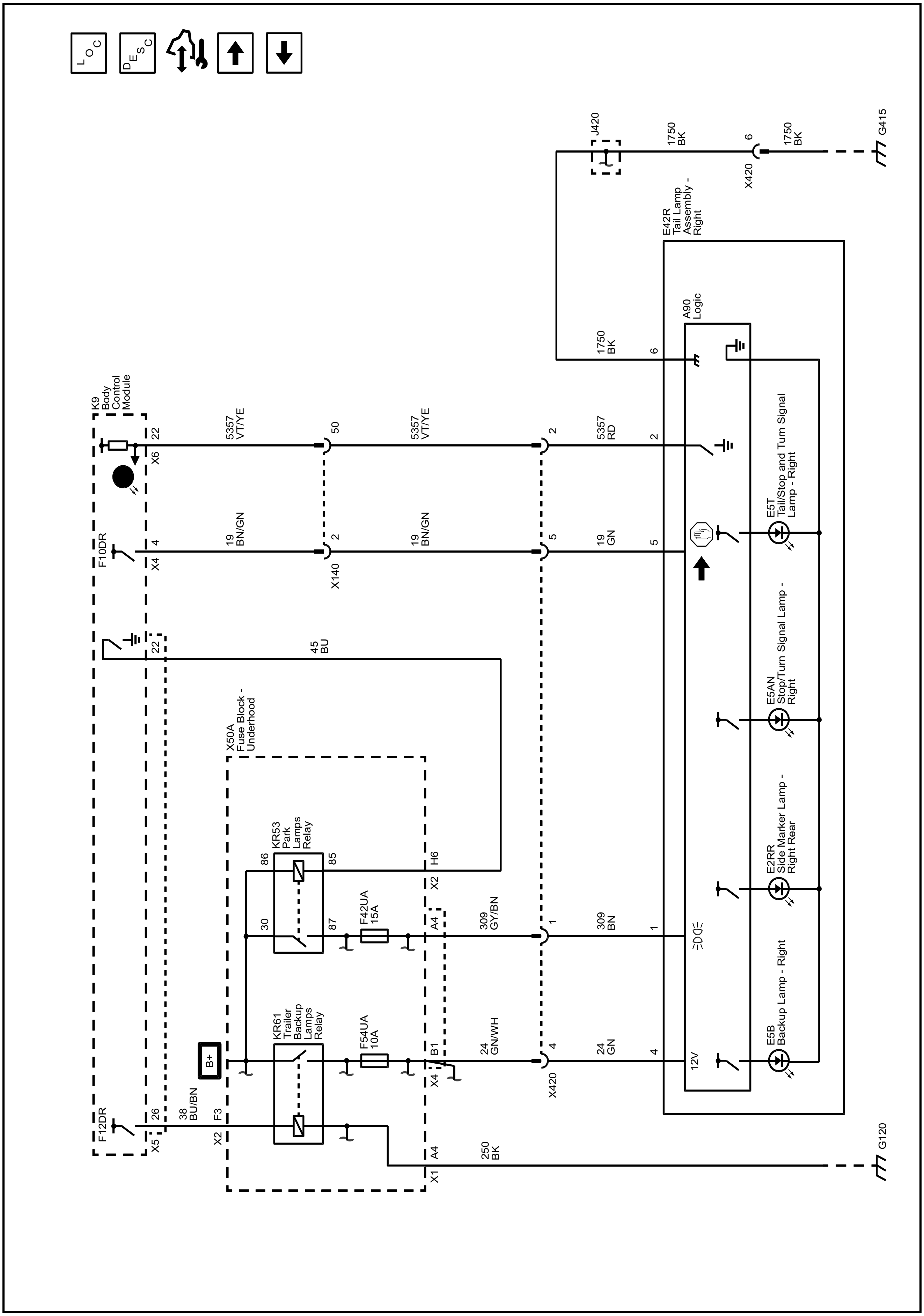
## Exterior Lights Schematics (Tail Lamp Assembly - Right (GFF/GFI/GFJ))


5082201
LOC
DESC
K9 Body Control Module
F10DR
X4 4
22
F12DR
X5 26
19 BN/GN
X140 2
19 BN/GN
45 BU
38 BU/BN
X2 F3
X50A Fuse Block - Underhood
KR53 Park Lamps Relay
86
85
30
87
F42UA 15A
X2 H6
A4
KR61 Trailer Backup Lamps Relay
F54UA 10A
B+
X4 B1
X1 A4
309 GY/BN
24 GN/WH
X420 5
X420 1
X420 4
19 GN
309 BN
24 GN
2
E42R Tail Lamp Assembly - Right
E5AN Stop/Turn Signal Lamp - Right
A90 Logic
E5F Tail Lamp - Right
E2RR Side Marker Lamp - Right Rear
1
E5B Backup Lamp - 2 Right
1750 BK
1
1750 BK
1750 BK
1750 BK
J420
X420 6
1750 BK
G415
250 BK
G120

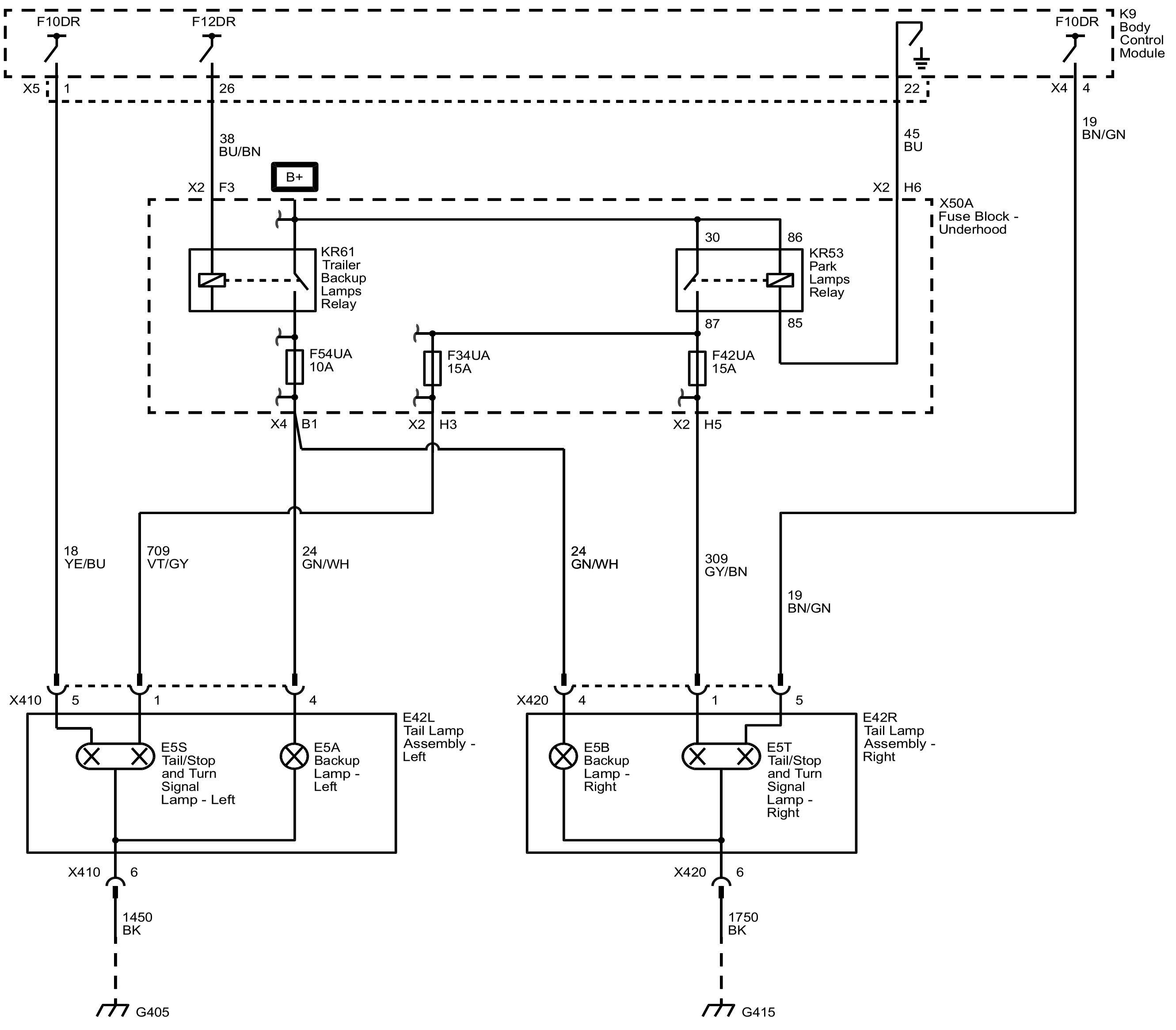
## Exterior Lights Schematics (Tail Lamp Assembly - Left (GFG/GFU/GFW))


F12DR
X5 26
38
BU/BN
X2 F3
B+
X50A
Fuse Block -
Underhood
KR61
Trailer
Backup
Lamps
Relay
30
86
KR53
Park
Lamps
Relay
87
85
F54UA
10A
F34UA
15A
X1 A4
X4 B1
A2
X2 H6
22
45
BU
F10DR
1
18
YE/BU
X140 12
K9
Body
Control
Module
X6 12
5356
YE/BK
40
24
GN/WH
709
VT/GY
X410 4
1
5
2
24
GN
709
BN
18
GN
5356
RD
1450
BK
J410
6
E42L
Tail Lamp
Assembly -
Left
12V
A90
Logic
X410 6
E5A
Backup Lamp - Left
E2LR
Side Marker Lamp -
Left Rear
E5AM
Stop/Turn Signal Lamp -
Left
E5S
Tail/Stop and Turn Signal
Lamp - Left
250
BK
G120
G405
L O C
D E S C
5082202

# Exterior Lights Schematics (Tail Lamp Assembly - Right (GFG/GFU/GFW))

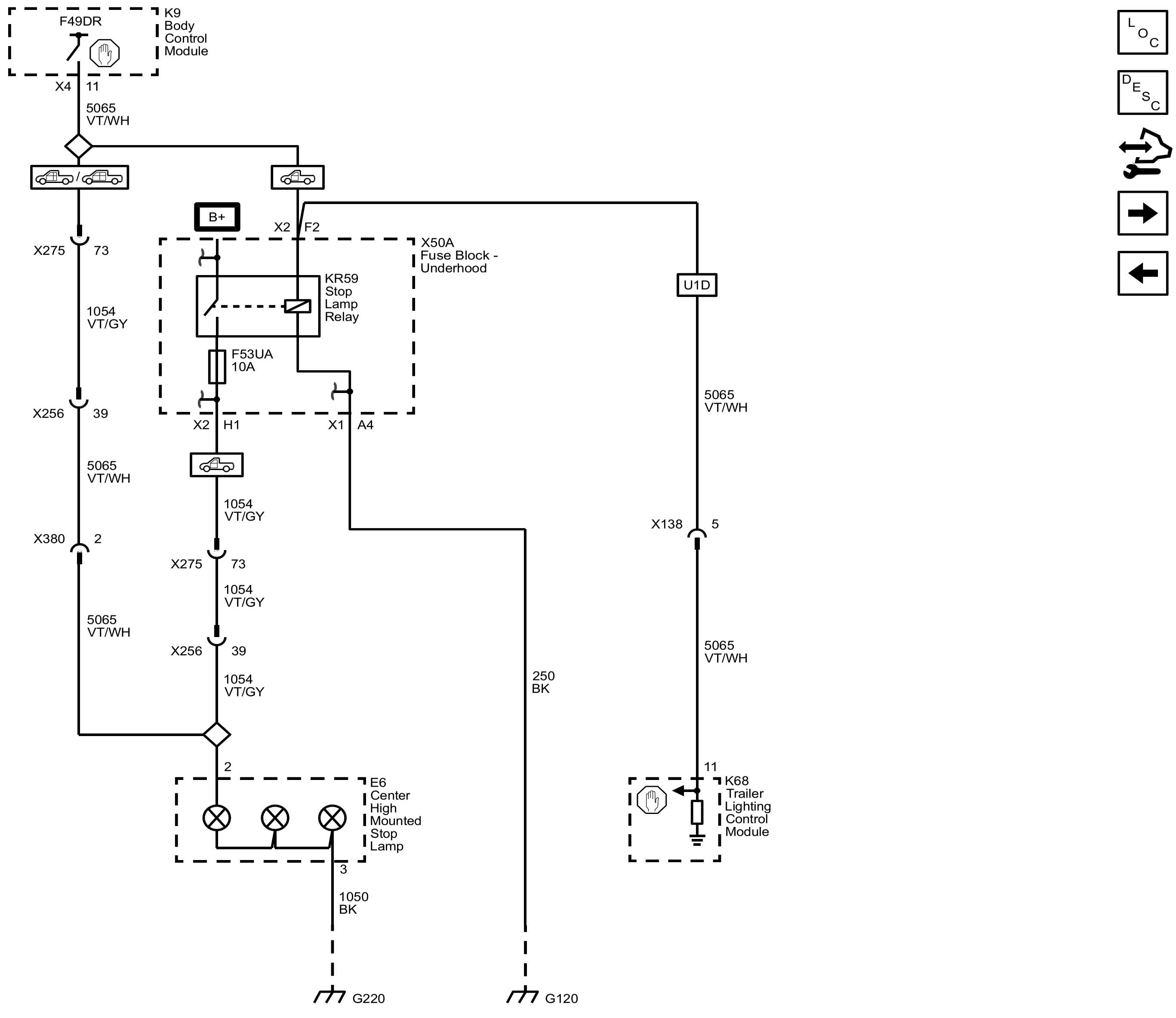

5082203
LOC
DESC
B+
K9 Body Control Module
F10DR
F12DR
X6 22
X4 4
22
X5 26
5357 VT/YE
19 BN/GN
45 BU
38 BU/BN
X2 F3
X140
50
2
X50A Fuse Block - Underhood
KR53 Park Lamps Relay
86
85
30
87
KR61 Trailer Backup Lamps Relay
F42UA 15A
F54UA 10A
X2 H6
A4
X4 B1
X1 A4
309 GY/BN
24 GN/WH
250 BK
X420
2
5
1
4
5357 RD
19 GN
309 BN
24 GN
1750 BK
6
J420
X420
G415
G120
E42R Tail Lamp Assembly - Right
A90 Logic
12V
E5T Tail/Stop and Turn Signal Lamp - Right
E5AN Stop/Turn Signal Lamp - Right
E2RR Side Marker Lamp - Right Rear
E5B Backup Lamp - Right

# Exterior Lights Schematics (Tail Lamp Assemblies (ZW9))


F10DR
F12DR
F10DR
K9
Body
Control
Module
X5 1
26
22
X4 4
38
BU/BN
45
BU
19
BN/GN
B+
X2 F3
X2 H6
X50A
Fuse Block -
Underhood
KR61
Trailer
Backup
Lamps
Relay
30
86
KR53
Park
Lamps
Relay
87
85
F54UA
10A
F34UA
15A
F42UA
15A
X4 B1
X2 H3
X2 H5
18
YE/BU
709
VT/GY
24
GN/WH
24
GN/WH
309
GY/BN
19
BN/GN
X410 5
1
4
X420 4
1
5
E42L
Tail Lamp
Assembly -
Left
E5S
Tail/Stop
and Turn
Signal
Lamp - Left
E5A
Backup
Lamp -
Left
E5B
Backup
Lamp -
Right
E5T
Tail/Stop
and Turn
Signal
Lamp -
Right
E42R
Tail Lamp
Assembly -
Right
X410 6
X420 6
1450
BK
1750
BK
G405
G415

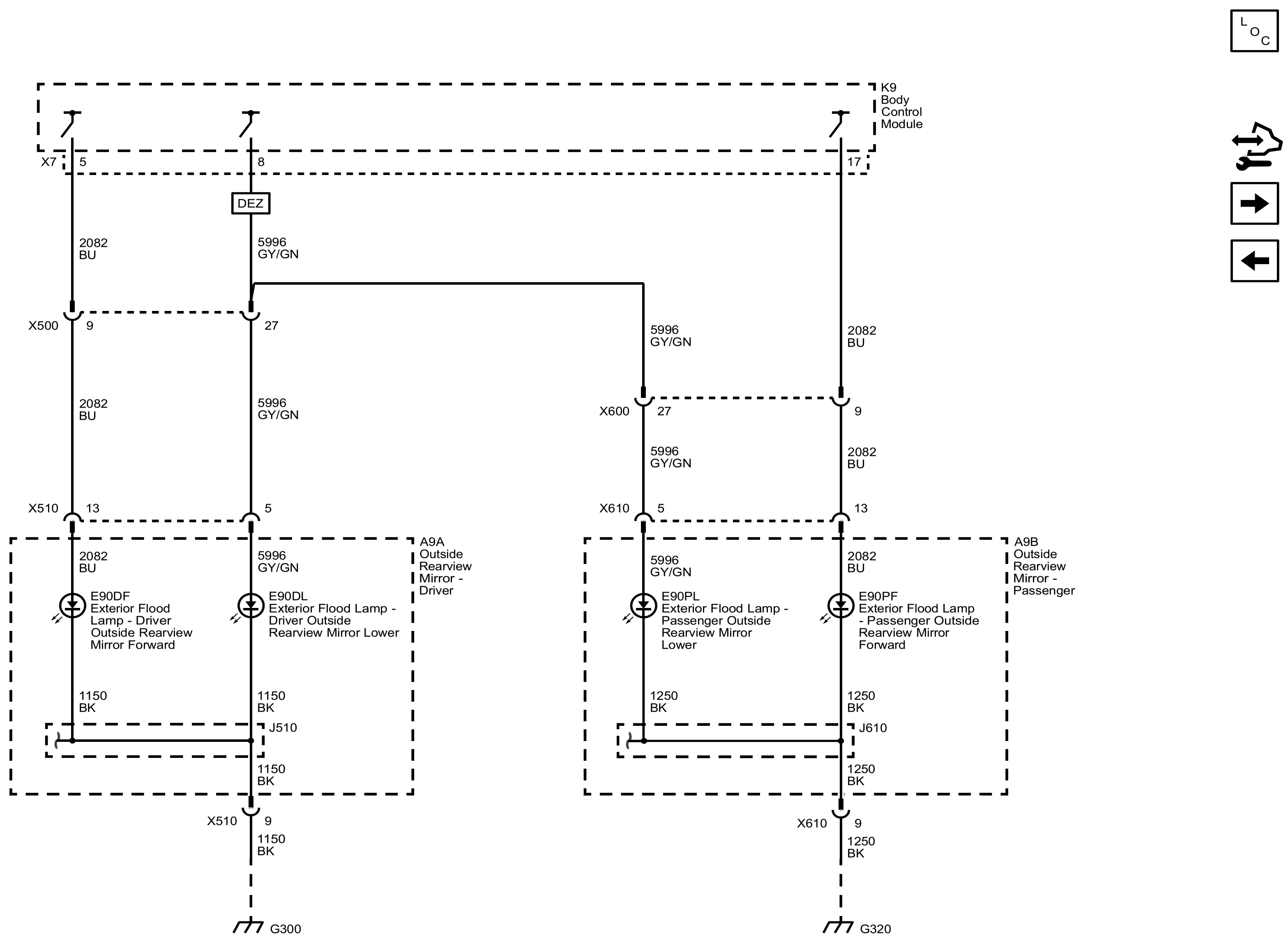
5082204

## Exterior Lights Schematics (Center High Mounted Stop Lamp)


F49DR
K9
Body
Control
Module
X4 11
5065
VT/WH
B+
X2 F2
X50A
Fuse Block -
Underhood
KR59
Stop
Lamp
Relay
F53UA
10A
X2 H1
X1 A4
U1D
X275 73
1054
VT/GY
X256 39
5065
VT/WH
X380 2
5065
VT/WH
1054
VT/GY
X275 73
1054
VT/GY
X256 39
1054
VT/GY
2
E6
Center
High
Mounted
Stop
Lamp
3
1050
BK
G220
250
BK
G120
5065
VT/WH
X138 5
5065
VT/WH
11
K68
Trailer
Lighting
Control
Module
LOC
DESC

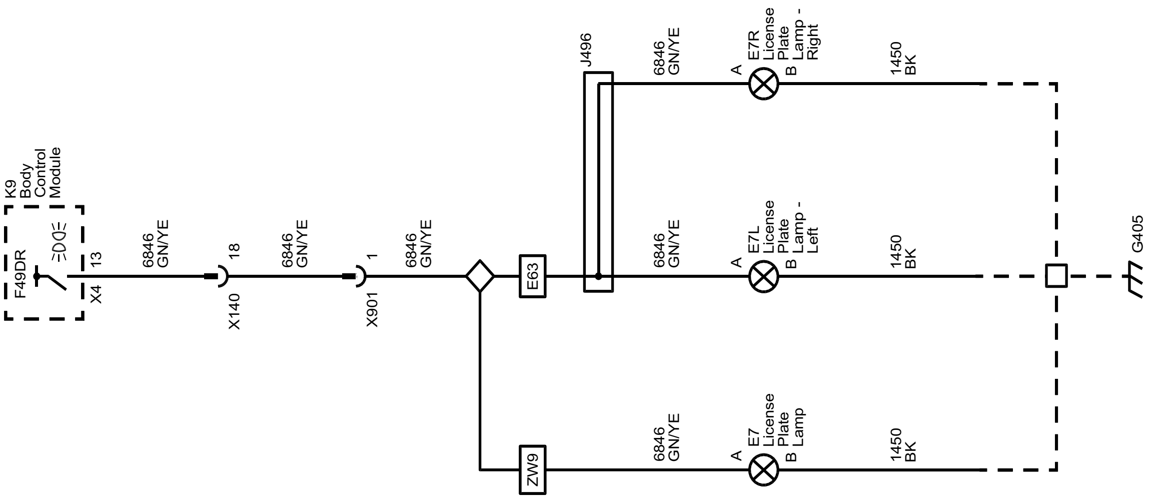
5086859

## Exterior Lights Schematics (Mirrors (DEZ/DLF))

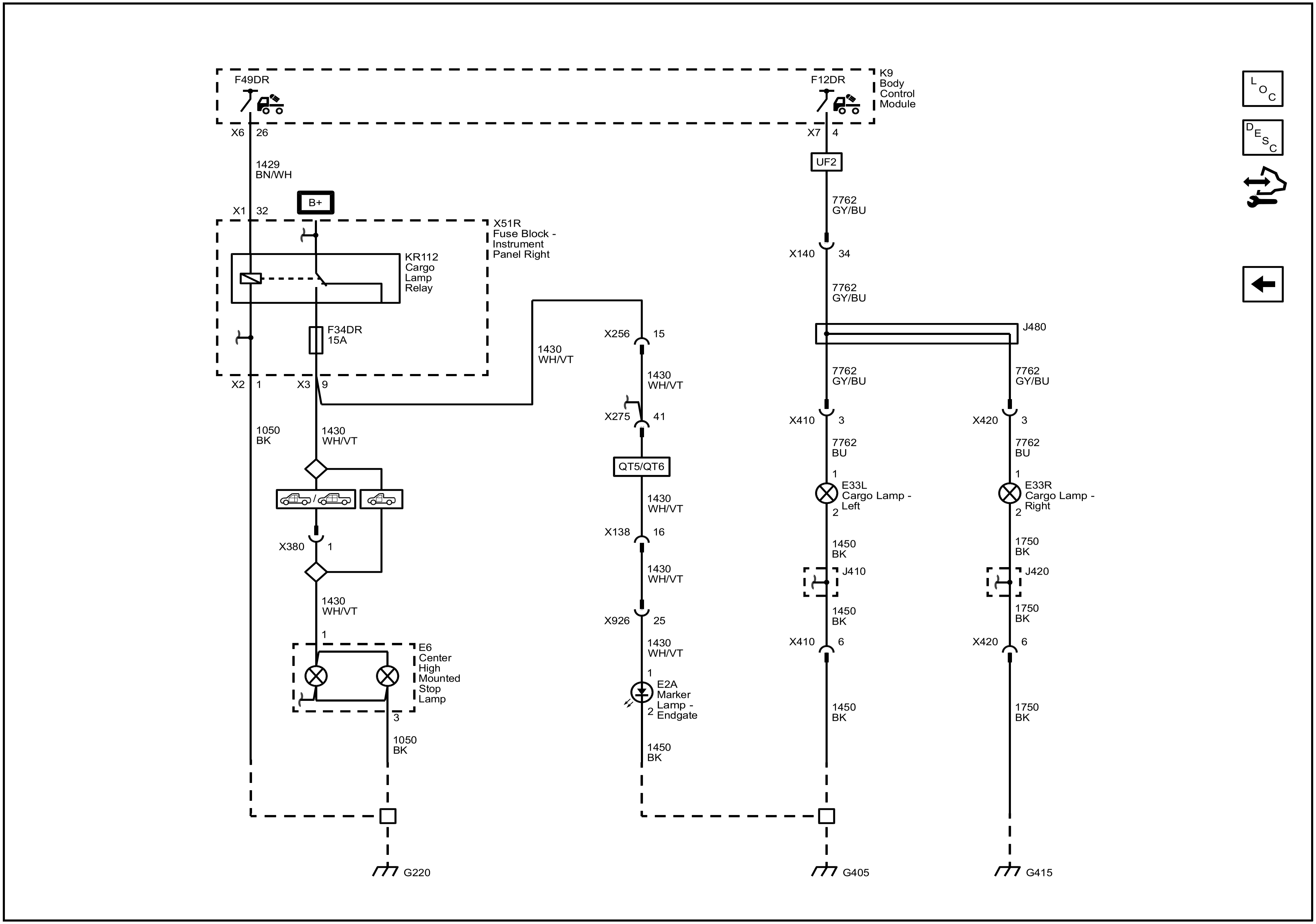

L O C
K9
Body
Control
Module
X7
5
8
17
DEZ
2082
BU
5996
GY/GN
X500
9
27
5996
GY/GN
2082
BU
X600
27
9
X510
13
5
X610
5
13
A9A
Outside
Rearview
Mirror -
Driver
E90DF
Exterior Flood
Lamp - Driver
Outside Rearview
Mirror Forward
E90DL
Exterior Flood Lamp -
Driver Outside
Rearview Mirror Lower
1150
BK
J510
X510
9
G300
A9B
Outside
Rearview
Mirror -
Passenger
E90PL
Exterior Flood Lamp -
Passenger Outside
Rearview Mirror
Lower
E90PF
Exterior Flood Lamp
- Passenger Outside
Rearview Mirror
Forward
1250
BK
J610
X610
9
G320

5082205

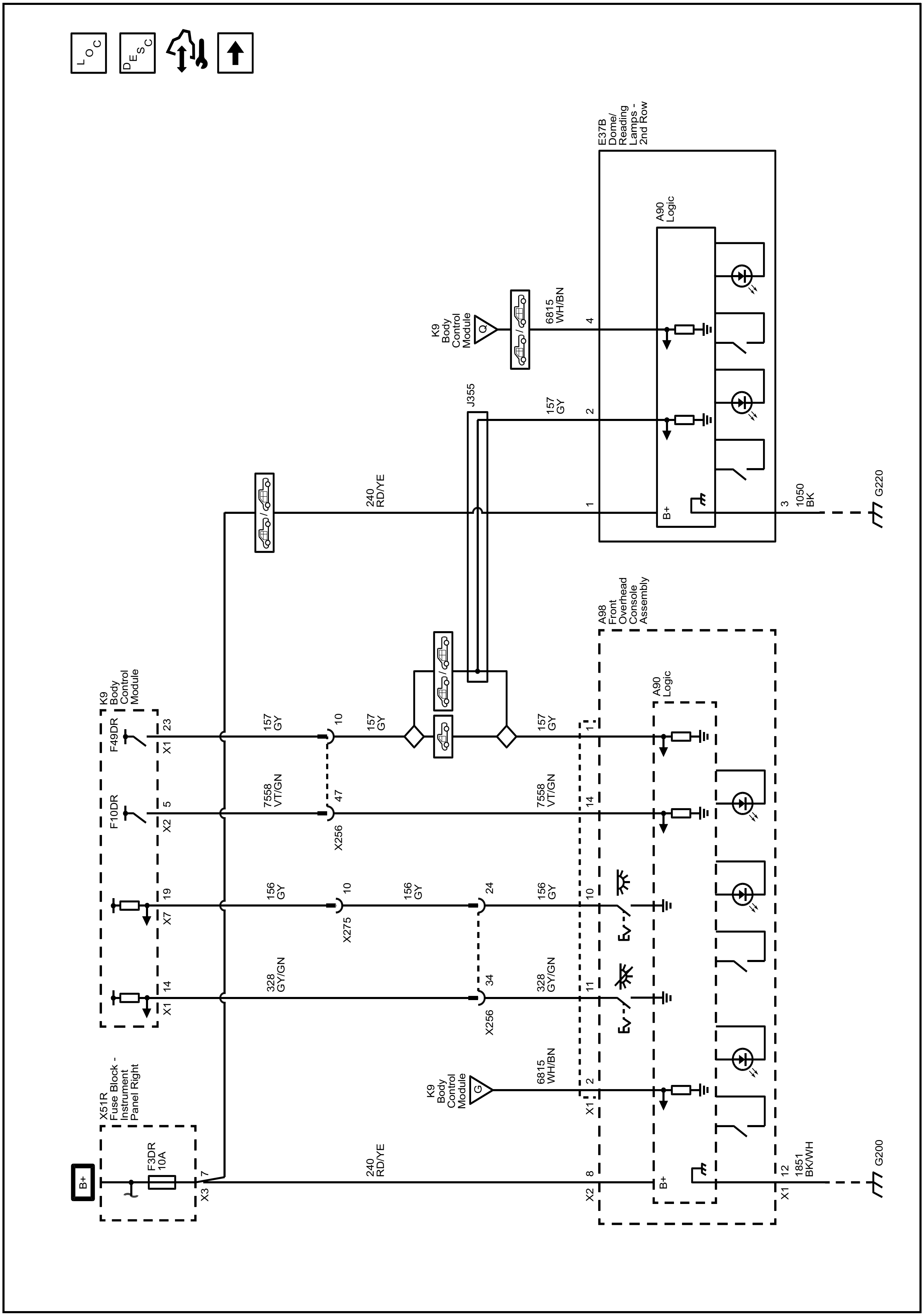
## Exterior Lights Schematics (License Plate Lamps)


K9
Body
Control
Module
F49DR
X4
13
6846
GN/YE
18
X140
6846
GN/YE
1
X901
6846
GN/YE
E63
J496
ZW9
6846
GN/YE
A
E7R
License
Plate
B Lamp -
Right
1450
BK
6846
GN/YE
A
E7L
License
Plate
B Lamp -
Left
1450
BK
6846
GN/YE
A
E7
License
Plate
B Lamp
1450
BK
G405
5082206

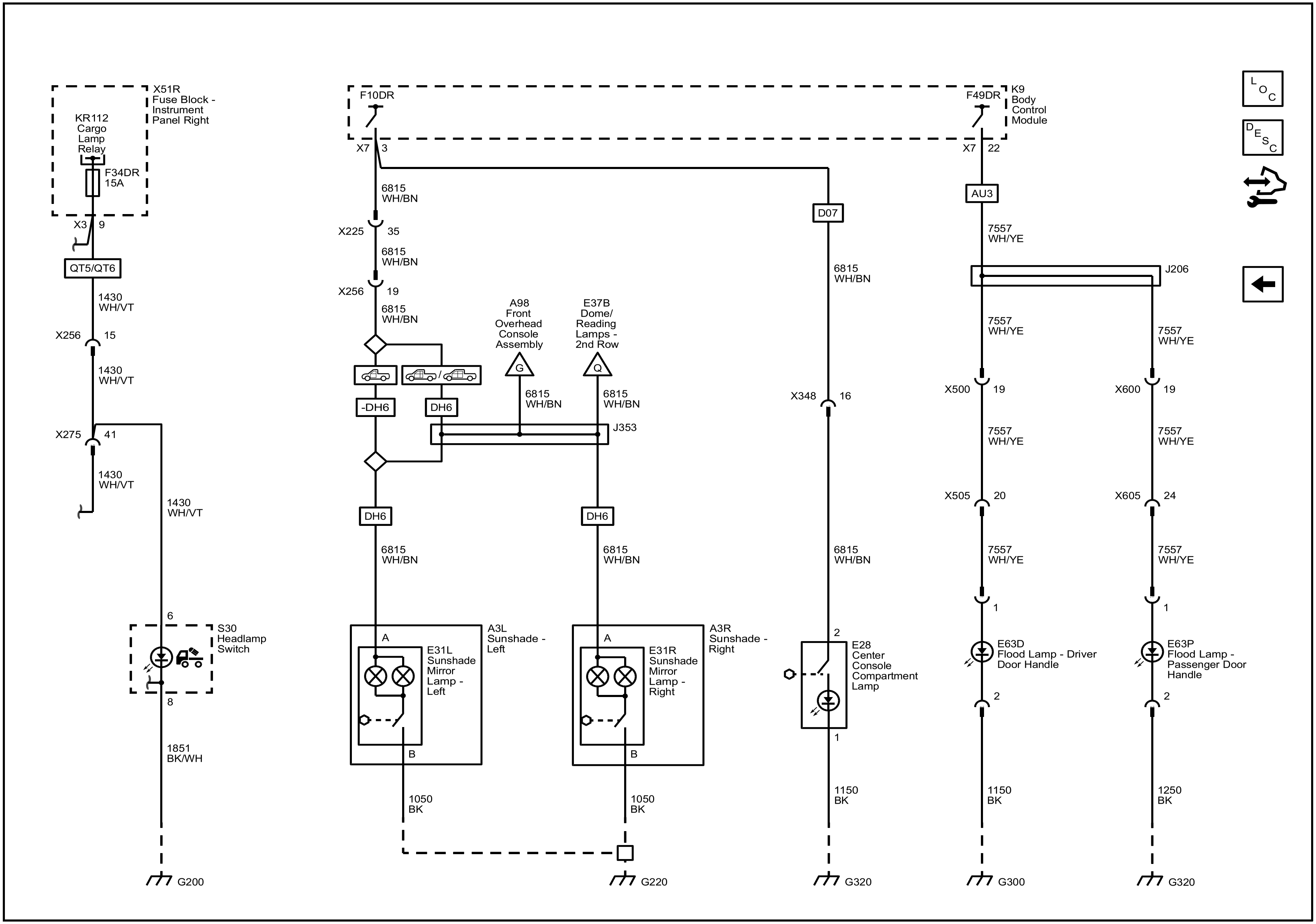
# Exterior Lights Schematics (Cargo Lamps (UF2))


F49DR
X6 26
1429
BN/WH
X1 32
B+
X51R
Fuse Block -
Instrument
Panel Right
KR112
Cargo
Lamp
Relay
F34DR
15A
X2 1
X3 9
1050
BK
1430
WH/VT
X380 1
E6
Center
High
Mounted
Stop
Lamp
3
1050
BK
G220
F12DR
K9
Body
Control
Module
X7 4
UF2
7762
GY/BU
X140 34
J480
X256 15
X275 41
QT5/QT6
X138 16
X926 25
1
E2A
Marker
Lamp -
2 Endgate
1450
BK
X410 3
7762
BU
E33L
Cargo Lamp -
Left
J410
X410 6
G405
X420 3
E33R
Cargo Lamp -
Right
1750
BK
J420
X420 6
G415
5082207

## Interior Lights Schematics (Controls and Overhead Lamps)

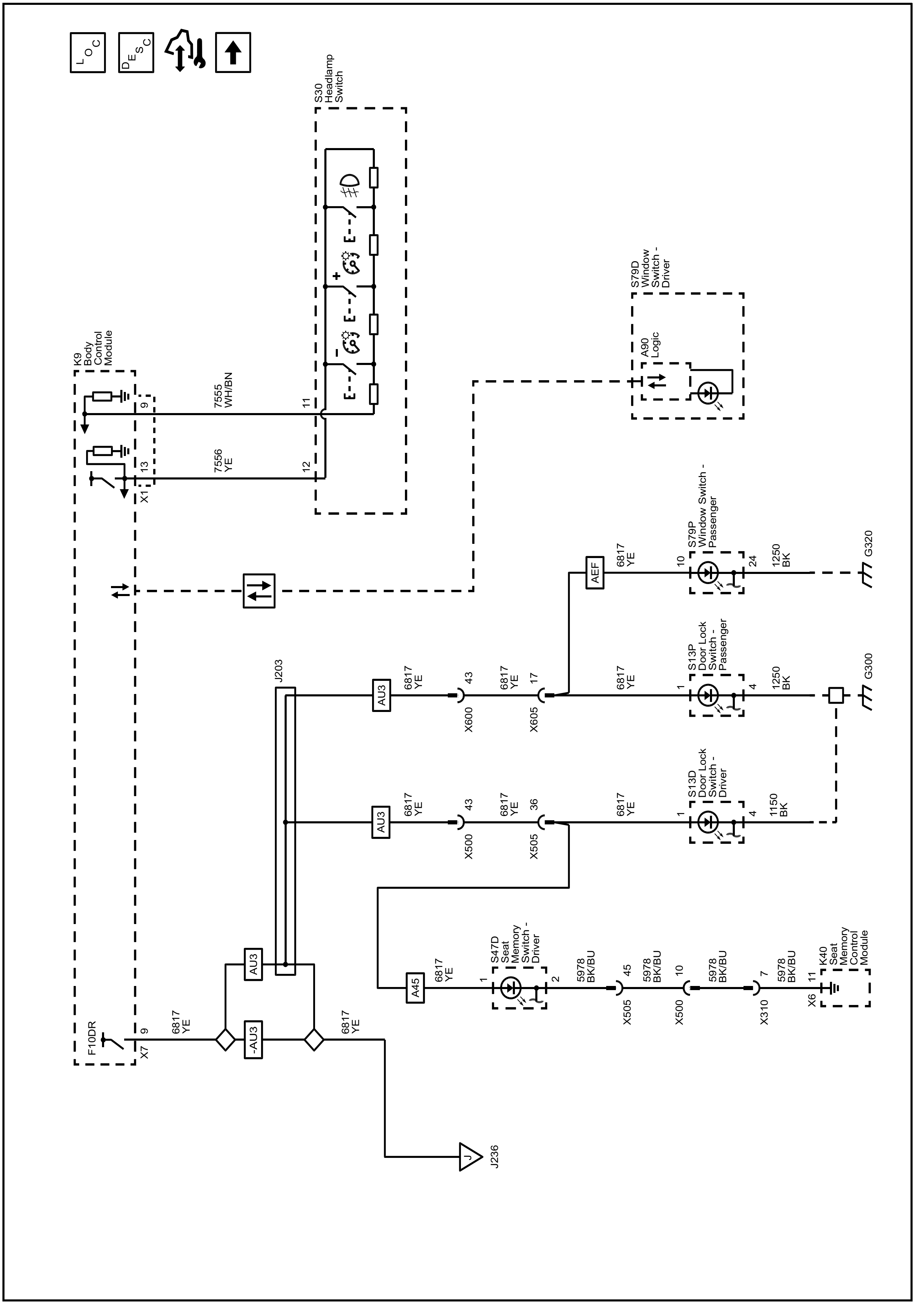

LOC
DESC
4978072
B+
X51R Fuse Block - Instrument Panel Right
F3DR 10A
X3
7
240 RD/YE
K9 Body Control Module
X1 14
X7 19
X2 5
X1 23
F10DR
F49DR
328 GY/GN
156 GY
7558 VT/GN
157 GY
X256
X275
10
47
24
34
J355
K9 Body Control Module
G
Q
6815 WH/BN
A98 Front Overhead Console Assembly
A90 Logic
X1 2
X1 1
14
10
11
X2 8
X1 12
1851 BK/WH
G200
E37B Dome/Reading Lamps - 2nd Row
1
2
4
3
1050 BK
G220

# Interior Lights Schematics (Cargo Lamp Indicator, Sunshade, Center Console, and Door Lamps)

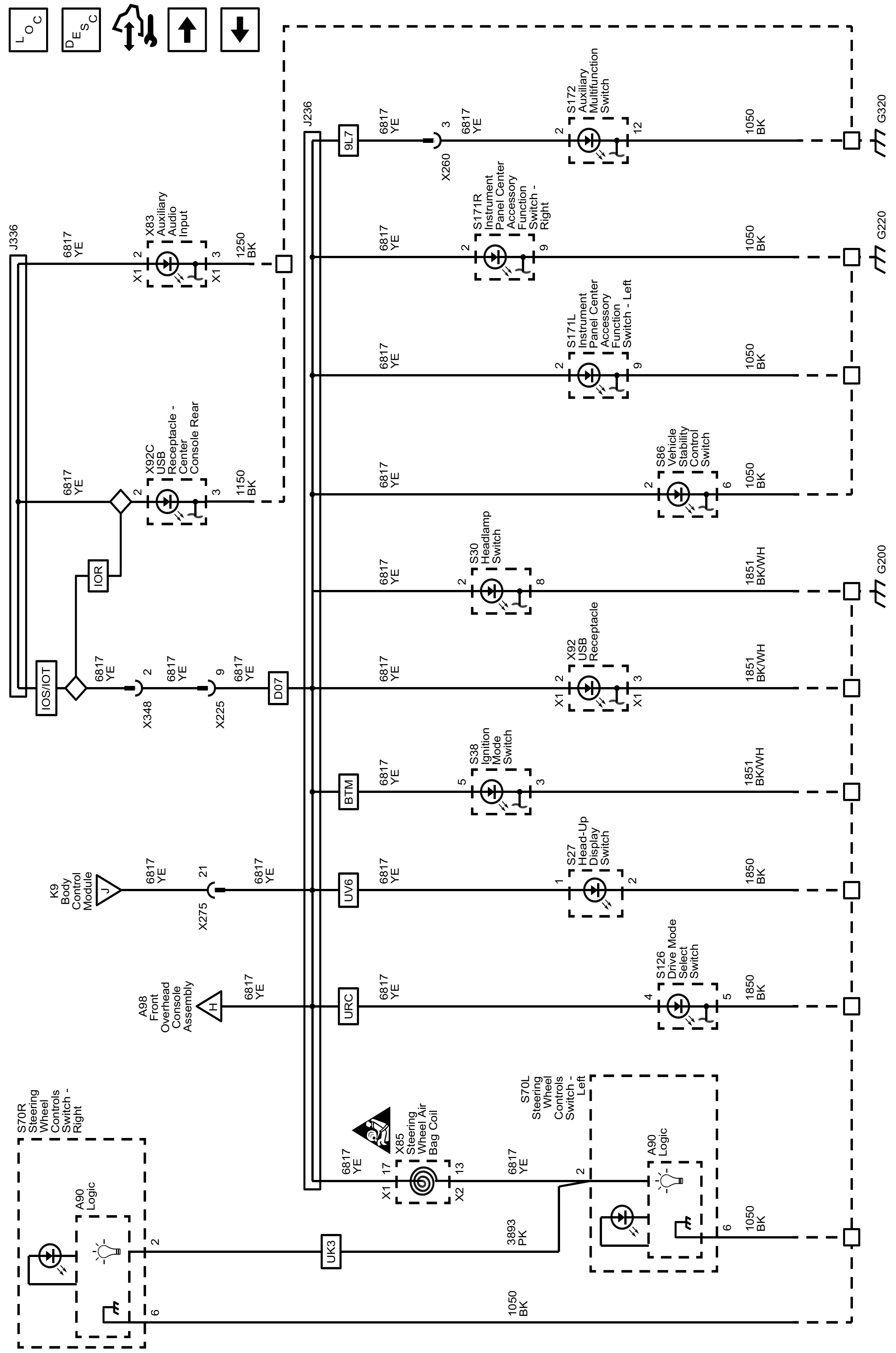

X51R
Fuse Block - Instrument Panel Right
KR112 Cargo Lamp Relay
F34DR 15A
X3 9
QT5/QT6
1430 WH/VT
X256 15
1430 WH/VT
X275 41
1430 WH/VT
1430 WH/VT
6
S30 Headlamp Switch
8
1851 BK/WH
G200
F10DR
X7 3
6815 WH/BN
X225 35
6815 WH/BN
X256 19
6815 WH/BN
-DH6
DH6
A98 Front Overhead Console Assembly
G
6815 WH/BN
E37B Dome/ Reading Lamps - 2nd Row
Q
6815 WH/BN
J353
DH6
6815 WH/BN
DH6
6815 WH/BN
A
A
E31L Sunshade Mirror Lamp - Left
A3L Sunshade - Left
E31R Sunshade Mirror Lamp - Right
A3R Sunshade - Right
B
B
1050 BK
1050 BK
G220
D07
6815 WH/BN
X348 16
6815 WH/BN
2
E28 Center Console Compartment Lamp
1
1150 BK
G320
F49DR
K9 Body Control Module
X7 22
AU3
7557 WH/YE
J206
7557 WH/YE
7557 WH/YE
X500 19
X600 19
7557 WH/YE
7557 WH/YE
X505 20
X605 24
7557 WH/YE
7557 WH/YE
1
1
E63D Flood Lamp - Driver Door Handle
E63P Flood Lamp - Passenger Door Handle
2
2
1150 BK
1250 BK
G300
G320
L O C
D E S C

4978073

## Interior Lights Dimming Schematics (Controls and Backlights (1 of 2))


LOC
DESC
4978074
K9 Body Control Module
S30 Headlamp Switch
X1
9
13
7555 WH/BN
7556 YE
11
12
S79D Window Switch - Driver
A90 Logic
F10DR
X7
9
6817 YE
AU3
-AU3
J203
AU3
6817 YE
43
X600
6817 YE
17
X605
AEF
6817 YE
10
S79P Window Switch - Passenger
24
1250 BK
G320
6817 YE
1
S13P Door Lock Switch - Passenger
4
1250 BK
G300
AU3
6817 YE
43
X500
6817 YE
36
X505
6817 YE
1
S13D Door Lock Switch - Driver
4
1150 BK
A45
6817 YE
1
S47D Seat Memory Switch - Driver
2
5978 BK/BU
45
X505
5978 BK/BU
10
X500
5978 BK/BU
7
X310
5978 BK/BU
11
X6
K40 Seat Memory Control Module
J
J236

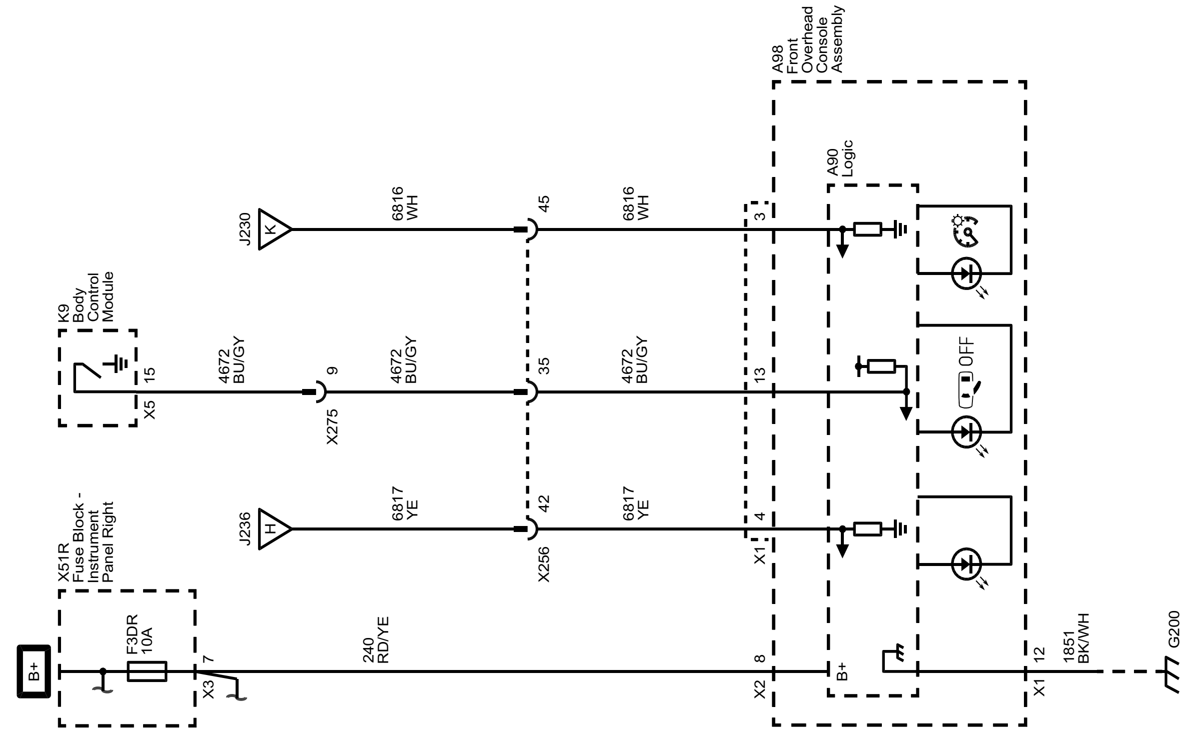
## Interior Lights Dimming Schematics (Backlights (2 of 2))


L O C
D E S C
J336
J236
6817 YE
1250 BK
1150 BK
1050 BK
1851 BK/WH
1850 BK
3893 PK
X83 Auxiliary Audio Input
X1 2
X1 3
X92C USB Receptacle - Center Console Rear
IOR
IOS/IOT
X348
X225
D07
9L7
X260
S172 Auxiliary Multifunction Switch
12
G320
S171R Instrument Panel Center Accessory Function Switch - Right
G220
S171L Instrument Panel Center Accessory Function Switch - Left
S86 Vehicle Stability Control Switch
S30 Headlamp Switch
G200
X92 USB Receptacle
BTM
S38 Ignition Mode Switch
K9 Body Control Module
J
X275
21
UV6
S27 Head-Up Display Switch
A98 Front Overhead Console Assembly
H
URC
S126 Drive Mode Select Switch
S70R Steering Wheel Controls Switch - Right
A90 Logic
X85 Steering Wheel Air Bag Coil
X1 17
X2 13
UK3
S70L Steering Wheel Controls Switch - Left

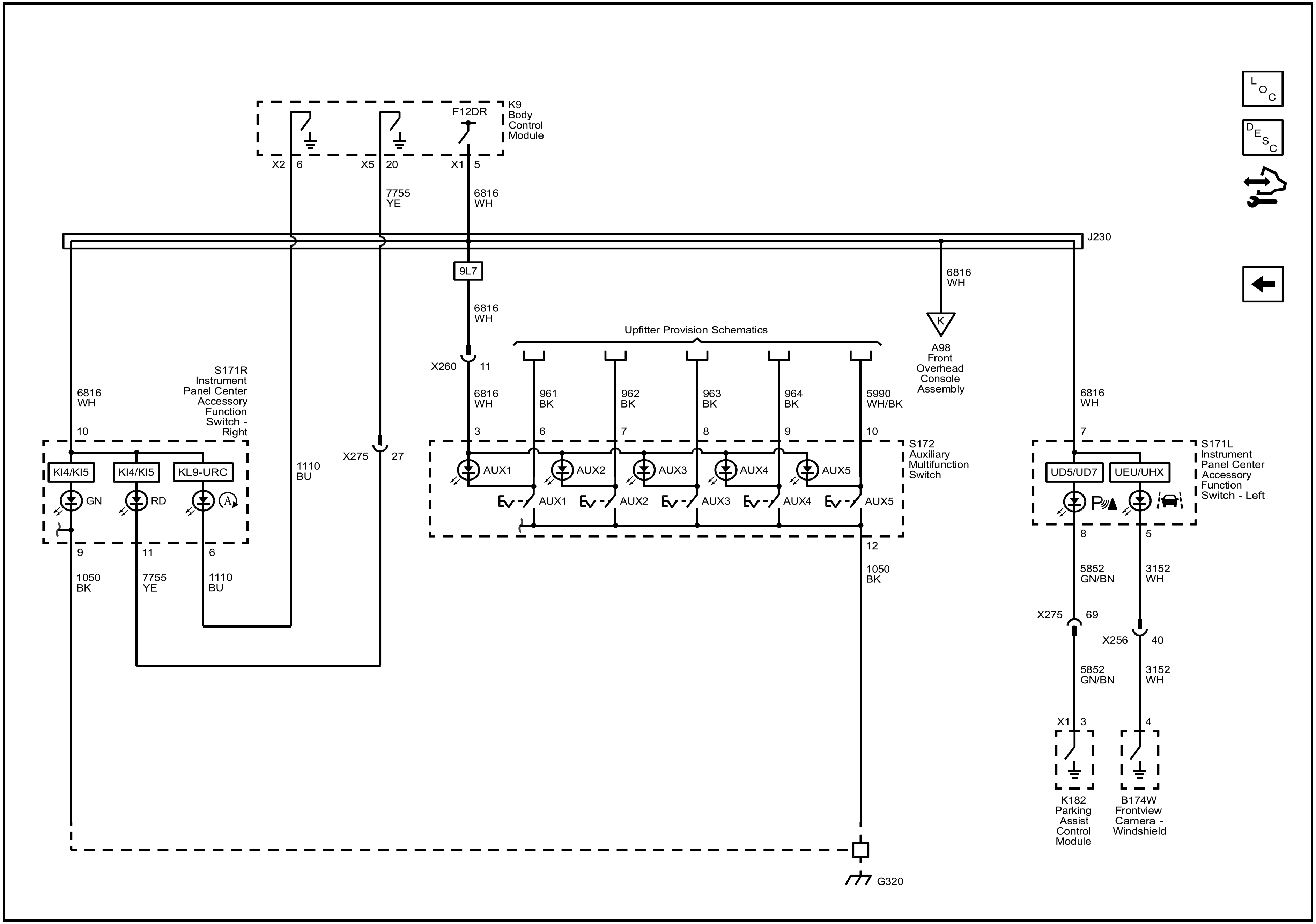
4978075

# Interior Lights Dimming Schematics (Front Overhead Console Assembly)

5067743


B+
X51R
Fuse Block - Instrument Panel Right
F3DR
10A
X3
7
240
RD/YE
J236
H
6817
YE
42
X256
6817
YE
X1
4
K9
Body
Control
Module
X5
15
4672
BU/GY
X275
9
4672
BU/GY
35
4672
BU/GY
13
J230
K
6816
WH
45
6816
WH
3
A98
Front
Overhead
Console
Assembly
A90
Logic
X2
8
B+
OFF
X1
12
1851
BK/WH
G200

# Interior Lights Dimming Schematics (Indicators)


K9
Body
Control
Module
F12DR
X2 6
X5 20
X1 5
7755
YE
6816
WH
J230
9L7
6816
WH
6816
WH
A98
Front
Overhead
Console
Assembly
Upfitter Provision Schematics
X260 11
S171R
Instrument
Panel Center
Accessory
Function
Switch -
Right
6816
WH
10
KI4/KI5
KI4/KI5
KL9-URC
GN
RD
9
11
6
1050
BK
7755
YE
1110
BU
1110
BU
X275 27
6816
WH
3
961
BK
6
962
BK
7
963
BK
8
964
BK
9
5990
WH/BK
10
S172
Auxiliary
Multifunction
Switch
AUX1
AUX2
AUX3
AUX4
AUX5
AUX1
AUX2
AUX3
AUX4
AUX5
12
1050
BK
G320
6816
WH
7
S171L
Instrument
Panel Center
Accessory
Function
Switch - Left
UD5/UD7
UEU/UHX
8
5
5852
GN/BN
3152
WH
X275 69
X256 40
5852
GN/BN
3152
WH
X1 3
4
K182
Parking
Assist
Control
Module
B174W
Frontview
Camera -
Windshield
L O C
D E S C
4978076

# Description and Operation

## Exterior Lighting Systems Description and Operation

The exterior lighting system consist of the following lamps:

- Automatic high beam assist
- Backup lamps
- Daytime running lamps
- Front fog lamps
- Hazard warning lamps
- Headlamps
- Park, tail, license, and marker lamps
- Stop lamps
- Turn signal lamps
- Trailer lighting

### Low Beam Headlamps

The headlamps may be turned ON in 3 different ways:

- When the headlamp switch is placed in the ON position, for normal operation
- When the headlamp switch is placed in the AUTO position, for automatic lamp control
- When the headlamp switch is placed in the AUTO position, with the windshield wipers ON in daylight conditions, after a 6 second delay

The BCM will also command the low beam headlamps ON during daylight conditions when the following conditions are met:

- Headlamp switch in the AUTO position
- Windshield wipers ON
- Vehicle in any gear but PARK

When the BCM commands the low beam headlamps ON, the vehicle operator will notice the interior backlighting for the instrument cluster and the various switches with backlighting control will dim to the level of brightness selected by the instrument panel dimmer switch.

The body control module (BCM) monitors three signal circuits from the headlamp switch. When the headlamp switch is in the AUTO position, all three signal circuits are open. When placed in the AUTO position, the BCM monitors inputs from the ambient light sensor to determine if headlamps are required or if daytime running lamps will be activated based on outside lighting conditions. When the headlamp switch is placed in the OFF position, the headlamp switch headlamps OFF signal circuit is grounded, indicating to the BCM that the exterior lamps should be turned OFF. With the headlamp switch in the PARK position, the headlamp switch park lamps ON signal circuit is grounded, indicating that the park lamps have been requested. When the headlamp switch is placed in the HEADLAMP position, both the headlamp switch park lamps ON signal circuit and the headlamp switch headlamps ON signal circuit are grounded. The BCM responds to the inputs by illuminating the park lamps and headlamps. When the low beam headlamps are requested, the BCM applies B+ to both low beam headlamp control circuits illuminating the low beam headlamps.

### High Beam Headlamps

When the low beam headlamps are ON and the turn signal/multifunction switch is placed in the high beam position, ground is applied to the BCM through the high beam signal circuit. The BCM responds to the high beam request by applying ground to the high beam relay control circuit which energizes the high beam relay. With the high beam relay energized, the switch contacts close allowing battery voltage to flow through the high beam fuse to the high beam control circuits to there respective high beam solenoid actuators located within the headlamp assemblies. With the left and right high beam solenoid actuators active, the solenoid shutters open in each headlamp assembly exposing the remaining portion of the headlamp that was covered by the shutters illuminating the high beams at full intensity.

### Automatic High Beam Assist (AHBA)

The automatic high beam assist (AHBA) system operates the high beam headlamps ON and OFF automatically when the system is activated and certain conditions are met. The AHBA system consists of a front camera module that detects light and is able to identify approaching vehicles on an even, straight road at a distance of greater than 0.4 km (0.25 mi). The front camera module analyzes light color, intensity, and movement. The AHBA system will turn OFF the high beam headlamps when approaching vehicle headlamps or preceding vehicle taillights are detected by the front camera module. AHBA can be deactivated when the headlamp dimmer switch is moved from the neutral position to the high beam or flash to pass positions. AHBA can be reactivated by operating the high beam select switch from the neutral position to the high beam position twice within 2 seconds.

#### AHBA System Activation

- Vehicle ON
- Headlamp switch placed in the AUTO position
- Headlamp dimmer switch must be in the neutral position
- Outside lighting conditions must be dark
- Vehicle speed greater than 25 mph (40 km/h)

#### AHBA System Operation

The following are conditions that the AHBA system will turn the high beam headlamps off during operation:

- The system detects approaching traffic headlamps
- The system detects preceding traffic tail lamps
- Ambient light level too high due to towns or twilight situations
- The vehicle’s speed drops below 13 mph (22 km/h)
- Delay

**Note:** AHBA may not operate properly if any of the following conditions exist:

- Approaching and preceding vehicles lamps are undetectable due to dirt, snow, road spray, smoke, fog, or any other airborne conditions.
- The front camera module is covered with ice, dirt, snow, haze, or is obstructed.
- The vehicle is being driven on winding or hilly road conditions which would make any on coming vehicle headlamps undetectable by the AHBA.

### AHBA System Deactivation

- Manually operating the headlamp dimmer switch from neutral to high beam position
- AHBA is deactivated automatically when the front or rear fog lamps are turned ON

### AHBA System Indicator

The status of the AHBA system is shown by a green indicator located on the instrument panel cluster. When AHBA is active, the indicator will be illuminated continuously. If the operator deactivates the AHBA system, the indicator will turn off.

## Daytime Running Lamps

The daytime running lamps will illuminate continuously when the following conditions are met:

- The ignition is in the RUN or CRANK position
- The shift lever is out of the PARK position for vehicles equipped with automatic transmissions or the parking brake is released for vehicles with manual transmissions
- The low and high beam headlamps are OFF

The ambient light sensor is used to monitor outside lighting conditions. The ambient light sensor provides a voltage signal that will vary between 0.2 and 4.9 volts depending on outside lighting conditions. The body control module (BCM) provides a 5 V reference signal to the ambient light sensor and the HVAC control module provides a low reference ground. The BCM monitors the ambient light sensor signal circuit to determine if outside lighting conditions are correct for either daytime running lights or automatic lamp control when the headlamp switch is in the AUTO position. In daylight conditions the BCM applies B+ to both daytime running lamp control circuits to the left and right multifunction light emitting diode (LED) control modules located in each headlamp assembly. The multifunction LED control modules respond the to to the B+ input from the BCM by illuminating the left and right daytime running lamp LED’s. Any function or condition that turns on the low beam headlamps will cancel daytime running lamps operation.

## Flash to Pass

When the turn signal/multifunction switch is momentarily placed in the flash to pass position, ground is applied to the turn signal/multifunction switch. The turn signal/multifunction switch applies ground to the body control module (BCM) through the flash to pass switch signal circuit. The BCM responds to the flash to pass request by applying ground to the high beam relay control circuit. This energizes the high beam relay, closing the switch side contacts of the high beam relay, applying battery voltage to the 3 pin high beam fuse. Battery voltage is applied from the high beam fuse through the high beam control circuit to the high beam headlamp assemblies. This causes the high beam headlamps to illuminate at full brightness momentarily.

## Front Fog Lamps

The front fog lamp relay is supplied with battery voltage at all times. The front fog lamp switch signal circuit is grounded momentarily by pressing the front fog lamp switch. The body control module (BCM) energizes the front fog lamp relay by applying ground to the front fog lamp relay control circuit. When the front fog lamp relay is energized, the relay switch contacts close and battery voltage is applied through the front fog lamp fuse to the front fog lamp supply voltage circuit which illuminates the front fog lamps.

## Hazard Lamps

The hazard flashers may be activated in any power mode. The hazard switch signal circuit is momentarily grounded when the hazard switch is pressed. The body control module (BCM) responds to the hazard switch signal input by supplying battery voltage to all four turn signal lamps in an ON and OFF duty cycle. When the hazard switch is activated, the BCM sends a serial data message to the instrument panel cluster requesting both turn signal indicators to be cycled ON and OFF.

The instrument panel dimmer switch controls the brightness of the interior backlighting components. When the instrument panel dimmer switch is placed in a desired brightness position, the body control module (BCM) receives a signal from the instrument panel dimmer switch and responds by applying a pulse width modulated voltage to the hazard switch light emitting diode (LED) backlighting control circuit illuminating the LED to the desired level of brightness.

## Park, Tail, and License Lamps

When the headlamp switch is placed in the HEAD or PARK position, ground is applied to the park lamp switch ON signal circuit to the body control module (BCM). The BCM responds by applying voltage to the park lamps, tail lamps, and license lamps control circuits illuminating the park, tail, and license lamps.

## Stop Lamps

The brake pedal position sensor is used to sense the action of the driver application of the brake pedal. The brake pedal position sensor provides an analog voltage signal that will increase as the brake pedal is applied. The body control module (BCM) provides a low reference signal and a 5 V reference voltage to the brake pedal position sensor. When the variable signal reaches a voltage threshold indicating the brakes have been applied, the BCM will apply battery voltage to the left and right stop lamp control circuits as well as the center high mounted stop lamp control circuit illuminating the left and right stop lamps and the center high mounted stop lamp.

## Turn Signal Lamps

Ground is applied at all times to the turn signal/ multifunction switch. The turn signal lamps may only be activated with the ignition switch in the ON or START positions. When the turn signal/multifunction switch is placed in either the TURN RIGHT or TURN LEFT position, ground is applied to the body control module (BCM) through either the right turn or left turn signal switch signal circuit. The BCM responds to the turn signal switch input by applying a pulsating voltage to the front and rear turn signal lamps through there respective control circuits. When a turn signal request is received by the BCM, a serial data message is sent to the instrument cluster requesting the respective turn signal indicator be pulsed ON and OFF.

## Backup Lamps

### Automatic Transmission

With the engine ON and the transmission in the REVERSE position, the transmission control module (TCM) sends a serial data message to the body control module (BCM). The message indicates that the gear selector is in the REVERSE position. The BCM applies battery voltage to the backup lamps control circuit illuminating the backup lamps. Once the driver moves the gear selector out of the REVERSE position, a message is sent by the TCM via serial data requesting the BCM to remove battery voltage from the backup lamps control circuit. The engine must be ON for the backup lamps to operate.

### Manual Transmission

The engine control module (ECM) provides a signal circuit to the backup lamp switch which is permanently grounded. With the engine running and the transmission in the reverse position, the backup lamp switch signal circuit is pulled low and the ECM responds by sending a serial data message to the body control module (BCM). The message indicates that the gear selector is in the reverse position. The BCM energizes the backup lamp relay by applying battery voltage to the backup lamp relay control circuit. When the backup lamp relay is energized, the relay switch contacts close and battery voltage is applied through the backup lamp fuses to the backup lamp control circuits which illuminates the backup lamps. Once the driver moves the gear selector out of the reverse position, a message is sent by the ECM via serial data requesting the BCM to remove battery voltage from the backup lamp relay control circuit. The engine must be running for the backup lamps to operate.

## Exterior Courtesy Lighting

### Cargo Lamps

The cargo lamps are controlled by a cargo lamp relay and a dedicated cargo lamp control circuit from the body control module (BCM). The cargo lamp relay is supplied with ground at all times. The cargo lamp switch signal circuit is grounded momentarily by pressing the cargo lamp switch located within the headlamp switch. The body control module (BCM) responds by energizing the cargo lamp relay by applying battery voltage to the cargo lamp relay control circuit as well as the dedicated cargo lamp control circuit. When the cargo lamp relay is energized, the relay switch contacts close and battery voltage is applied through the cargo lamp fuse to the cargo lamp supply voltage circuit which illuminates the cargo lamps. Cargo lamps are located in the center high mounted stop lamp assembly, truck bed, and tailgate handle when equipped.

### Forward Flood Lamps

The flood lamp switch signal circuit is grounded momentarily by pressing the flood lamp switch located within the headlamp switch. The body control module (BCM) responds by applying battery voltage to the exterior flood lamp control circuits which illuminates the forward exterior flood lamps located within the exterior mirror assemblies. If the exterior flood lamps are left on with the vehicle off, the lights will shut off after approximately 10 minutes to prevent total battery discharge. The exterior flood lamps will immediately turn off if the vehicle leaves the parked position.

### Lower Flood Lamps

The body control module (BCM) supplies battery voltage to the exterior LED lighting located under each outside rearview mirror for approach lighting. When the keyless entry transmitter is operated to either the lock or unlock functions the LED lighting located under each outside rearview mirror are commanded ON for approach lighting.

## Trailer Lighting (With U1D)

The trailer lighting control module is supplied with battery voltage as well as ignition voltage and is permanently grounded. For lighting operation, the trailer lighting control module receives serial data messages from the body control module (BCM) indicating what lamps have been activated on the vehicle. The trailer lighting control module responds by applying voltage to the appropriate control circuits for the requested lamps illuminating the lamps on the attached trailer. The trailer lighting control module constantly monitors for trailer connection status, trailer lighting faults, and trailer theft deterrent purposes, this is accomplished through the lighting circuits of the trailer to determine if a trailer is connected. With the key OFF, the trailer lighting control module will periodically pulse the lighting circuits of the trailer to verify it is still connected. The lights on the trailer may flash at different intervals with the key OFF depending on which type of lights the trailer is built with. If a trailer is disconnected with the key ON, the vehicle will display a trailer disconnected message until a trailer is reconnected or the ignition is cycled.

### Backup Lamps

With the engine running and the transmission in the reverse position, the transmission control module (TCM) sends a serial data message that indicates the gear selector is in the reverse position. The Trailer Lighting Control Module responds by applying voltage to the X88 Trailer Connector on the Trailer Backup Lamps control circuit when a trailer is connected. Once the driver moves the gear selector out of the reverse position, a message is sent by the TCM via serial data requesting the Trailer Lighting Control Module to remove battery voltage from the backup lamp control circuit.

### Park Lamps

When the headlamp switch is placed in the HEAD or PARK position, ground is applied to the park lamp switch ON signal circuit to the body control module (BCM). The BCM responds by sending a serial data message to the Trailer Lighting Control Module. The Trailer Lighting Control Module responds by applying voltage to the X88 Trailer Connector on the Trailer Park Lamp control circuit when a trailer is connected.

### Stop Lamps

The brake pedal position sensor is used to sense the action of the driver application of the brake pedal. The brake pedal position sensor provides an analog voltage signal that will increase as the brake pedal is applied. The body control module (BCM) provides a low reference signal and a 5 V reference voltage to the brake pedal position sensor. When the variable signal reaches a voltage threshold indicating the brakes have been applied, the BCM energizes the stop lamp relay circuit by applying voltage to the stop lamp relay control circuit. The Trailer Lighting Control Module senses the voltage on the stop lamp relay circuit and responds by applying voltage to the X88 Trailer Connector on the left and right Trailer Stop/Turn Signal Lamp control circuits when a trailer is connected.

### Turn Signal Lamps

Ground is applied at all times to the turn signal/multifunction switch. The turn signal lamps may only be activated with the ignition switch in the ON or START positions. When the turn signal/multifunction switch is placed in either the TURN RIGHT or TURN LEFT position, ground is applied to the body control module (BCM) through either the right turn or left turn signal switch signal circuit. The BCM responds by sending a serial data message to the Trailer Lighting Control Module. The Trailer Lighting Control Module responds by applying voltage to the X88 Trailer Connector on either the left or right Trailer Stop/Turn Signal Lamp control circuits when a trailer is connected.

## Trailer Lighting (Without U1D)

### Backup Lamps

For backup lamp operation, the backup lamp relay is supplied with battery voltage at all times. With the engine running and the transmission in the reverse position, the transmission control module (TCM) sends a serial data message to the body control module (BCM). The message indicates that the gear selector is in the reverse position. The BCM energizes the backup lamp relay by applying battery voltage to the backup lamp relay control circuit. When the backup lamp relay is energized, the relay switch contacts close and battery voltage is applied through the backup lamp fuses to the backup lamp control circuits which illuminates the backup lamps. Once the driver moves the gear selector out of the reverse position, a message is sent by the TCM via serial data requesting the BCM to remove battery voltage from the backup lamp relay control circuit.

### Park Lamps

When the headlamp switch is placed in the HEAD or PARK position, ground is applied to the park lamp switch ON signal circuit to the body control module (BCM). The BCM responds by applying voltage to the park lamps, tail lamps, license lamps, and trailer park lamps control circuits illuminating the park, tail, license, and trailer park lamps.

### Stop Lamps

For stop lamp operation, the left and right trailer stop/turn signal lamp relay’s are supplied with battery voltage at all times. The brake pedal position sensor is used to sense the action of the driver application of the brake pedal. The brake pedal position sensor provides an analog voltage signal that will increase as the brake pedal is applied. The body control module (BCM) provides a low reference signal and a 5 V reference voltage to the brake pedal position sensor. When the variable signal reaches a voltage threshold indicating the brakes have been applied, the BCM energizes the left and right trailer stop/turn signal lamp relay’s by applying voltage to the left and right stop lamp relay control circuits. With the left and right trailer stop/turn signal lamp relay’s energized, the relay switch contacts close and battery voltage is applied through the left and right trailer stop/turn signal fuse’s to the trailer stop lamp control circuits which illuminates the trailer stop lamps.

### Turn Signal Lamps

For turn signal lamp operation, the left and right trailer stop/turn signal lamp relay’s are supplied with battery voltage at all times. Ground is applied at all times to the turn signal/multifunction switch. The turn signal lamps may only be activated with the ignition switch in the ON or START positions. When the turn signal/multifunction switch is placed in either the TURN RIGHT or TURN LEFT position, ground is applied to the body control module (BCM) through either the right turn or left turn signal switch signal circuit. The BCM responds to the turn signal switch input by applying a pulsating voltage to the left and right trailer stop/turn signal lamp relay control circuits energizing the relay’s in an ON and OFF cycle. With the left and right trailer stop/turn signal lamp relay’s energized, the relay switch contacts cycle ON and OFF applying battery voltage through the left and right trailer stop/turn signal fuse’s to the trailer turn signal lamp control circuits which illuminates the trailer turn signal lamps in an ON and OFF cycle.

## Battery Run Down Protection/Inadvertent Power

To provide battery run down protection, the exterior lamps will be deactivated automatically under certain conditions. The BCM monitors the state of the headlamp switch. If the park or headlamp switch is ON when the ignition switch is placed in either the CRANK or RUN position and then placed in the OFF position, the BCM initiates a 10 minute timer. At the end of the 10 minutes, the BCM will turn off the control power output to the park lamp controls as well as the headlamp relay coils, deactivating the exterior lamps. This feature will be cancelled if any power mode other than OFF becomes active. The BCM will disable battery run down protection if any of the following conditions exist. The park or headlamp switch is placed in the ON to OFF position, and back to the ON position during battery run down protection. The BCM determined that the park or headlamp switch was not active when the ignition was turned OFF.

# Interior Lighting Systems Description and Operation

## Interior Lamps

The interior lighting system consist of two groups. This first group includes lamps that may not be dimmed.

- Dome lamps
- Center console compartment lamps
- Reading lamps
- Sunshade mirror lamps

## Dome Lamps

The dome lamp switch has 3 positions: DOOR, OFF, and ON. The ON position provides a ground for continuous operation and the dome lamp will remain illuminated until the switch is placed in either the DOOR or OFF position. When in the DOOR position, the dome lamp operation is controlled by the body control module (BCM). When any door is opened, the door ajar switch contacts close and the BCM receives a door-open input. The BCM illuminates the dome lamp when any door is opened or a door lock/unlock request is activated with the key fob. After all doors have been closed, the dome lamp will remain illuminated approximately 3 seconds after the last door closes. When the driver places the dome lamp switch in the OFF position, the dome lamp will be disabled. In the event that the dome lamp were to remain illuminated for more than 10 minutes with the ignition switch in the OFF position and no doors opened, the BCM will deactivate the dome lamp control circuit to prevent total battery discharge. The dome lamps will turn OFF using the theater dimming feature when controlled by the BCM.

## Center Console Compartment Lamp

The inadvertent power supply voltage circuit from the BCM provides battery voltage to the center console compartment lamp. When the center console is opened, the center console compartment lamp switch contacts close providing a path to ground and the center console compartment lamp illuminates. If the operator inadvertently leaves the center console compartment door open with the center console compartment lamp ON, the BCM will turn all interior lamps OFF after 10 minutes has passed since any switch activation has been detected by the BCM.

## Reading Lamps

The inadvertent power supply voltage circuit from the BCM provides battery positive voltage to each reading lamp. When a reading lamp switch is activated, the switch contacts close providing a path to ground and the reading lamp illuminates. If the operator inadvertently leaves a reading lamp ON, the BCM will turn all interior lamps OFF after 10 minutes has passed since any switch activation has been detected by the BCM.

## Sunshade Mirror Lamps

The inadvertent power supply voltage circuit from the BCM provides battery voltage to each set of sunshade mirror lamps. When the sunshade mirror cover is opened, a switch closes providing ground and the sunshade lamps illuminate. If the operator inadvertently leaves a sunshade mirror cover open with the lamps ON, the BCM will turn all interior lamps OFF after 10 minutes has passed since any switch activation has been detected by the BCM.

## Keyless Entry Interior Illumination

When the operator uses the keyless entry transmitter in order to unlock the doors, the BCM receives a door-unlock signal. The BCM must receive inputs from various systems that indicate that the ignition switch is OFF, the courtesy lamp switch is OFF, and all doors are closed before the BCM will activate the interior lamps. After all doors have been closed, the courtesy lamps will turn OFF immediately if the ignition switch is turned to the ON position, the door locks are LOCKED, or approximately 20 seconds after the last door closes. The BCM will turn off the courtesy lamps through the theater dimming feature. The BCM keeps the courtesy lamps on for 40 seconds after an alarm event is completed.

## Interior Lamps Dimming

The second group includes lamps which may be dimmed. This group may use a combination of light emitting diodes (LED), incandescent lamps, and pulse width modulation (PWM) illumination.

- Dome/reading lamps – front
- Dome/reading lamps – rear
- Door lock switch – driver
- Door lock switch – passenger
- Garage door opener switch
- Headlamp switch
- HVAC control head assembly
- Multifunction switch – instrument panel
- Outside rearview mirror switch
- Park brake switch
- Radio
- Roof beacon switch
- Seat memory switch – driver
- Sliding rear window switch
- Steering wheel control switch – left
- Steering wheel control switch – right
- Sun roof switch
- Sun roof tilt switch
- Transfer case shift control switch
- Trailer brake control switch
- Window switch – driver
- Window switch – passenger

With the headlamp switch in the PARK or HEAD position, the park lamp switch signal circuit provides an input to the body control module (BCM). The BCM responds by applying voltage to the park lamps as well as the backlight dimming control circuits illuminating all components with interior backlighting. All interior backlighting turns ON at the dimming level indicated by the instrument panel dimmer switch. The instrument panel dimmer switch is a momentary type switch and utilizes a resistor ladder to increase and decrease the brightness of the interior backlighting components. The instrument panel dimmer switch provides a voltage signal to the BCM that will increase as the brightness of the lights are increased and decrease as the brightness of the lights are decreased. The BCM provides a low reference signal and a B+ circuit to the instrument panel dimmer switch. When the instrument panel dimmer switch is held in the desired position, the dimmed voltage setting is applied from the instrument panel dimmer switch through the instrument panel dimmer switch signal circuit to the BCM. The BCM interprets the signal and applies a pulse width modulated voltage through the backlighting control circuits illuminating the interior backlighting to the requested level of brightness.

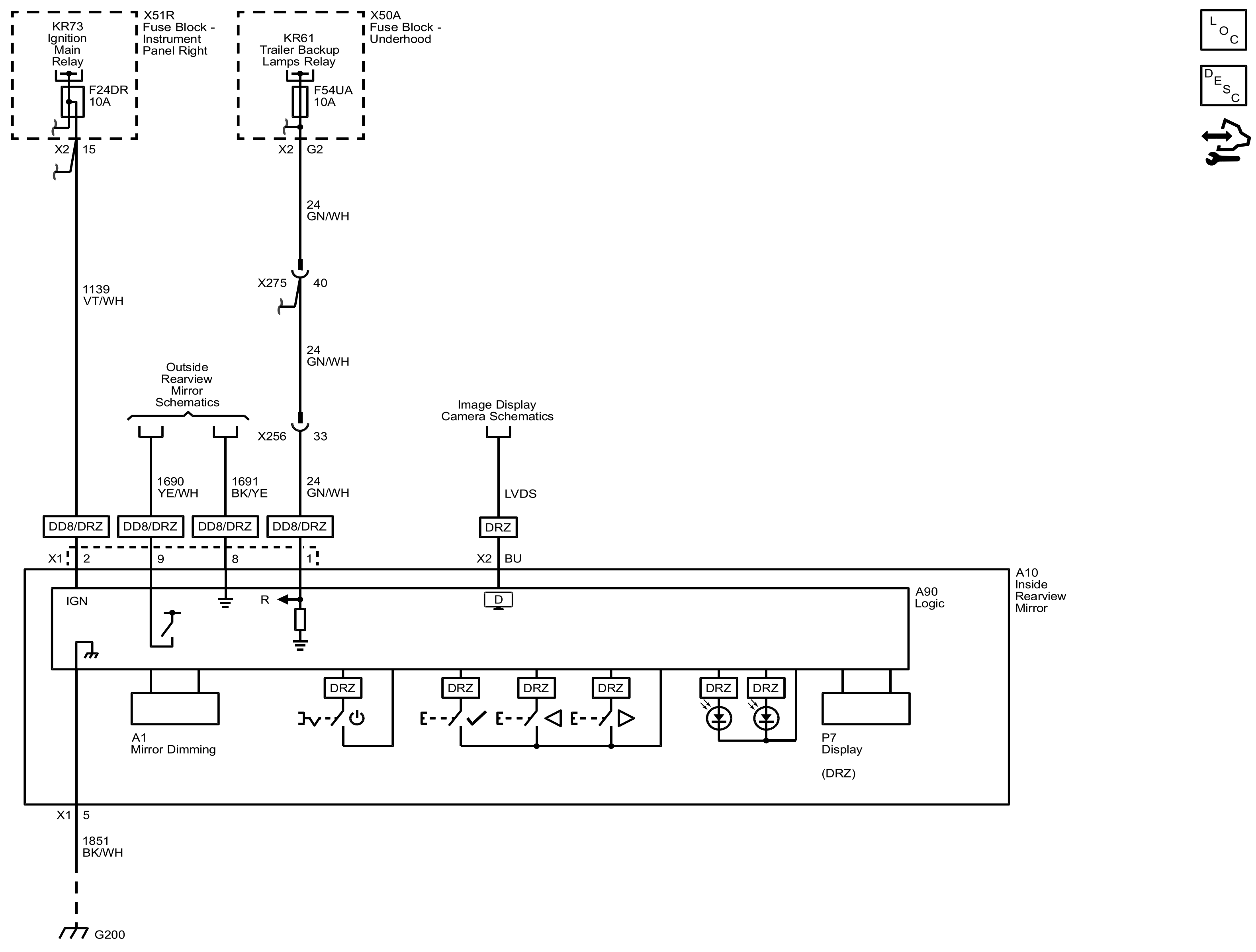
## Battery Rundown Protection/ Inadvertent Power

The BCM inadvertent power supply voltage circuit provides battery voltage to all of the interior courtesy lamps. In the event that any of these lamps were to remain illuminated for a period of more than 10 minutes with the ignition switch in the OFF position, the BCM will deactivate the inadvertent power supply voltage circuit to prevent total battery discharge. If the ignition switch is turned to any position other than OFF, or if a lamp switch is activated during this 10 minute period, the timer resets for another 10 minutes.

# Mirrors

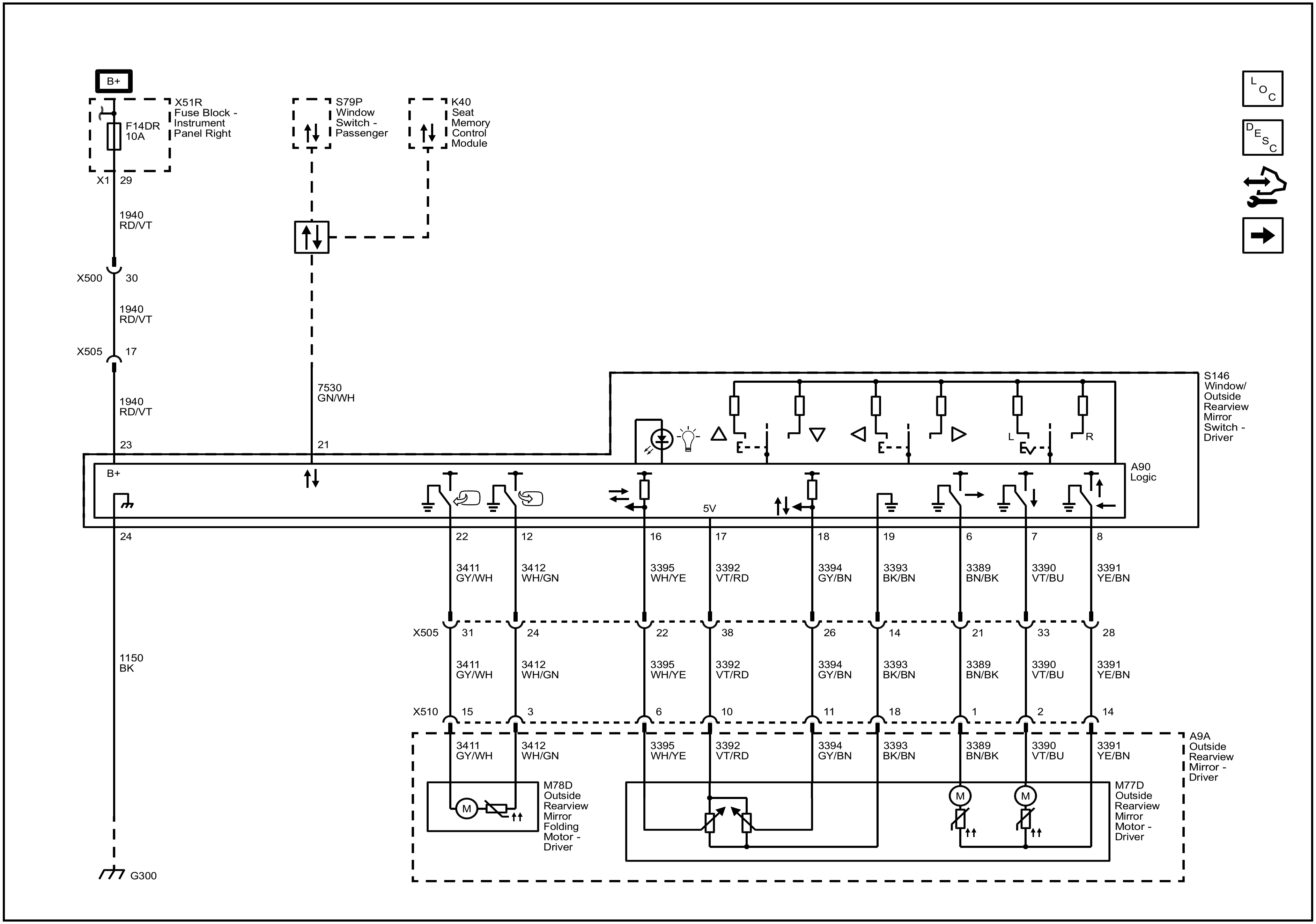
## Schematic and Routing Diagrams

# Inside Rearview Mirror Schematics (Inside Rearview Mirror)


KR73
Ignition
Main
Relay
F24DR
10A
X51R
Fuse Block -
Instrument
Panel Right
X2 15
KR61
Trailer Backup
Lamps Relay
F54UA
10A
X50A
Fuse Block -
Underhood
X2 G2
24
GN/WH
X275 40
1139
VT/WH
24
GN/WH
Outside
Rearview
Mirror
Schematics
Image Display
Camera Schematics
X256 33
1690
YE/WH
1691
BK/YE
24
GN/WH
LVDS
DD8/DRZ
DD8/DRZ
DD8/DRZ
DD8/DRZ
DRZ
X1 2
9
8
1
X2 BU
A10
Inside
Rearview
Mirror
IGN
R
D
A90
Logic
DRZ
DRZ
DRZ
DRZ
DRZ
DRZ
A1
Mirror Dimming
P7
Display
(DRZ)
X1 5
1851
BK/WH
G200
L O C
D E S C

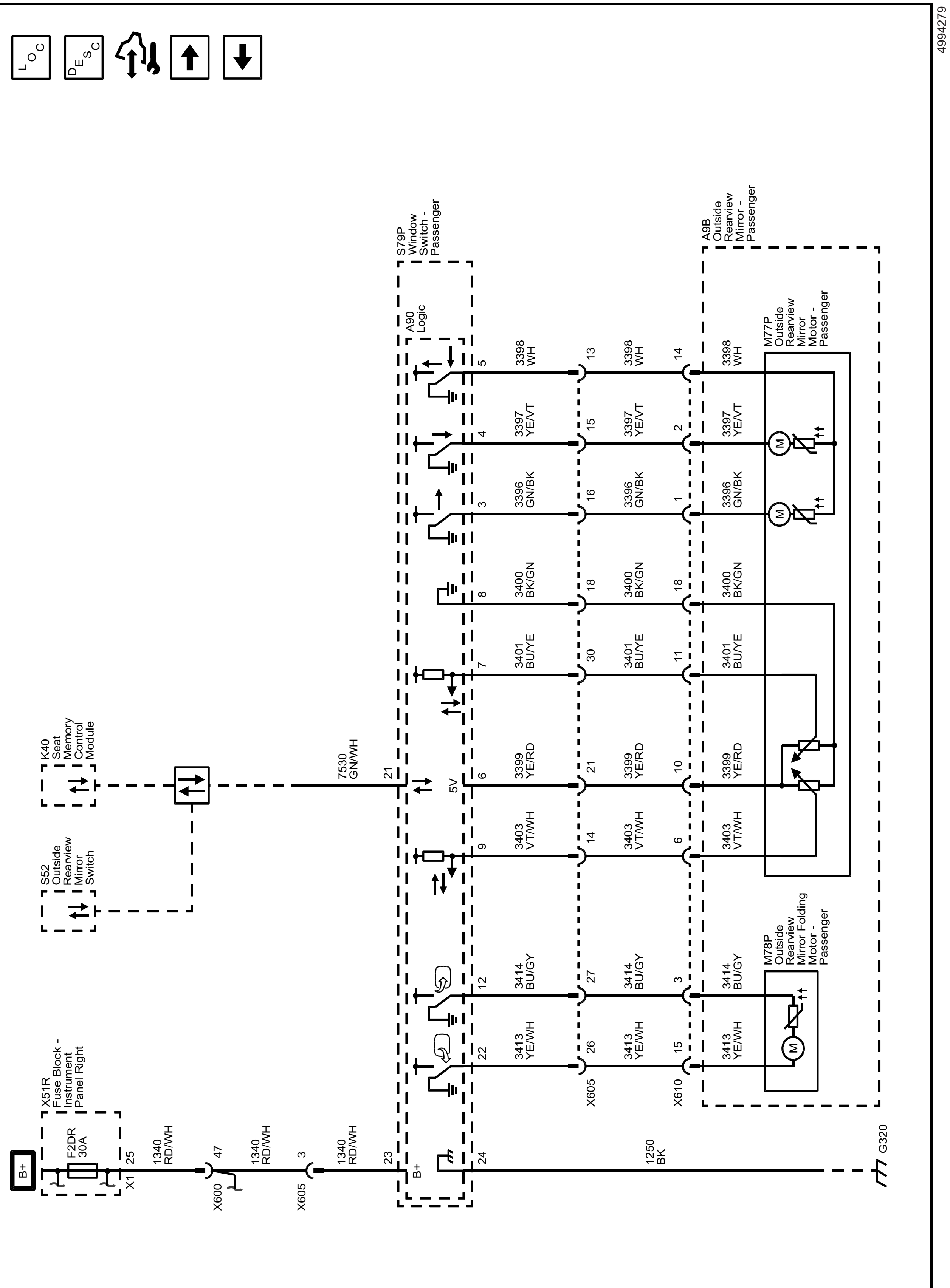
4978077

## Outside Rearview Mirror Schematics (Controls and Driver (A45))

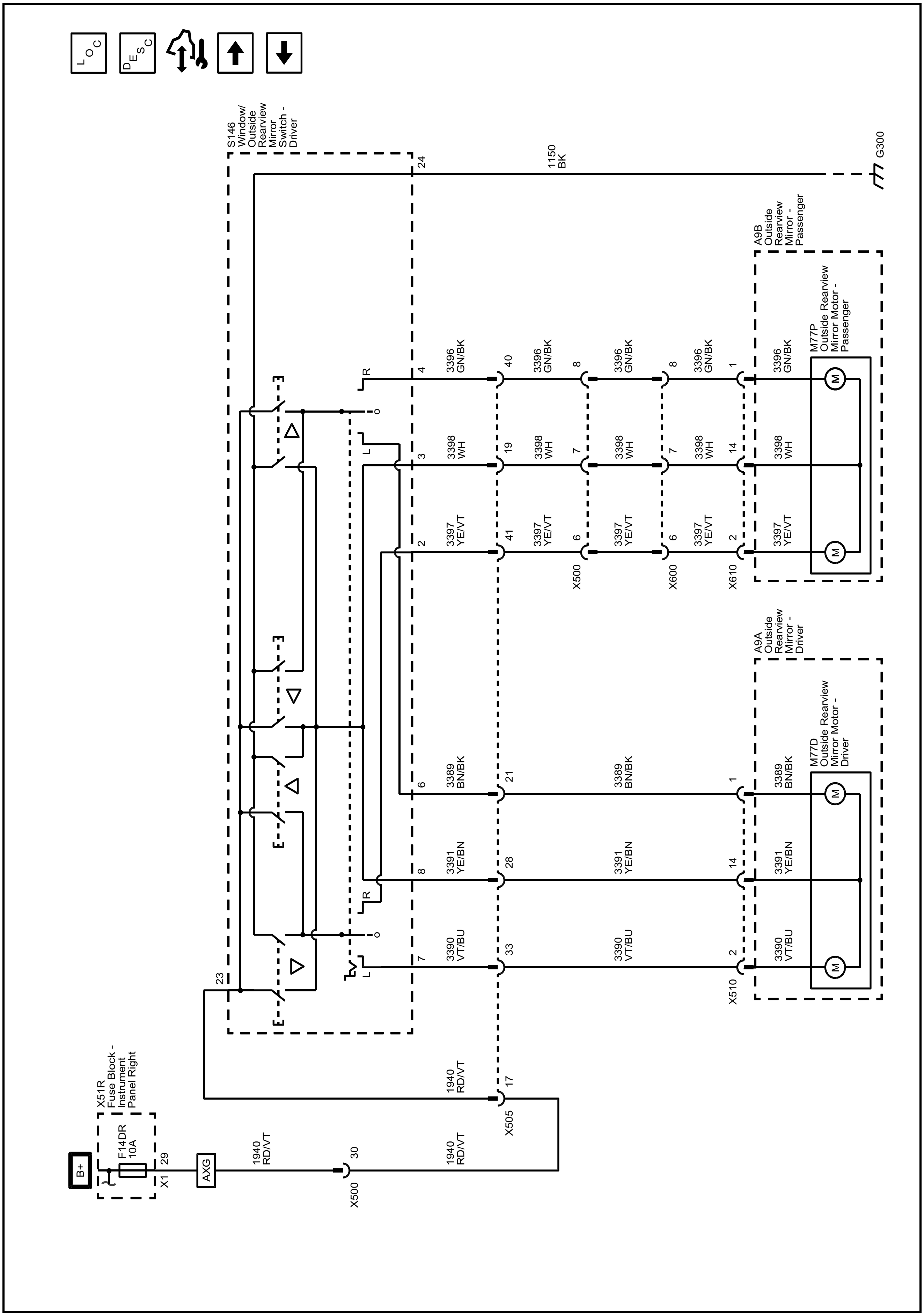

LOC
DESC
B+
X51R Fuse Block - Instrument Panel Right
F14DR 10A
X1 29
1940 RD/VT
X500 30
1940 RD/VT
X505 17
1940 RD/VT
23
B+
24
1150 BK
G300
S79P Window Switch - Passenger
K40 Seat Memory Control Module
7530 GN/WH
21
S146 Window/ Outside Rearview Mirror Switch - Driver
A90 Logic
L
R
5V
22
12
16
17
18
19
6
7
8
3411 GY/WH
3412 WH/GN
3395 WH/YE
3392 VT/RD
3394 GY/BN
3393 BK/BN
3389 BN/BK
3390 VT/BU
3391 YE/BN
X505
31
24
22
38
26
14
21
33
28
X510
15
3
6
10
11
18
1
2
14
A9A Outside Rearview Mirror - Driver
M78D Outside Rearview Mirror Folding Motor - Driver
M77D Outside Rearview Mirror Motor - Driver
M

4994277

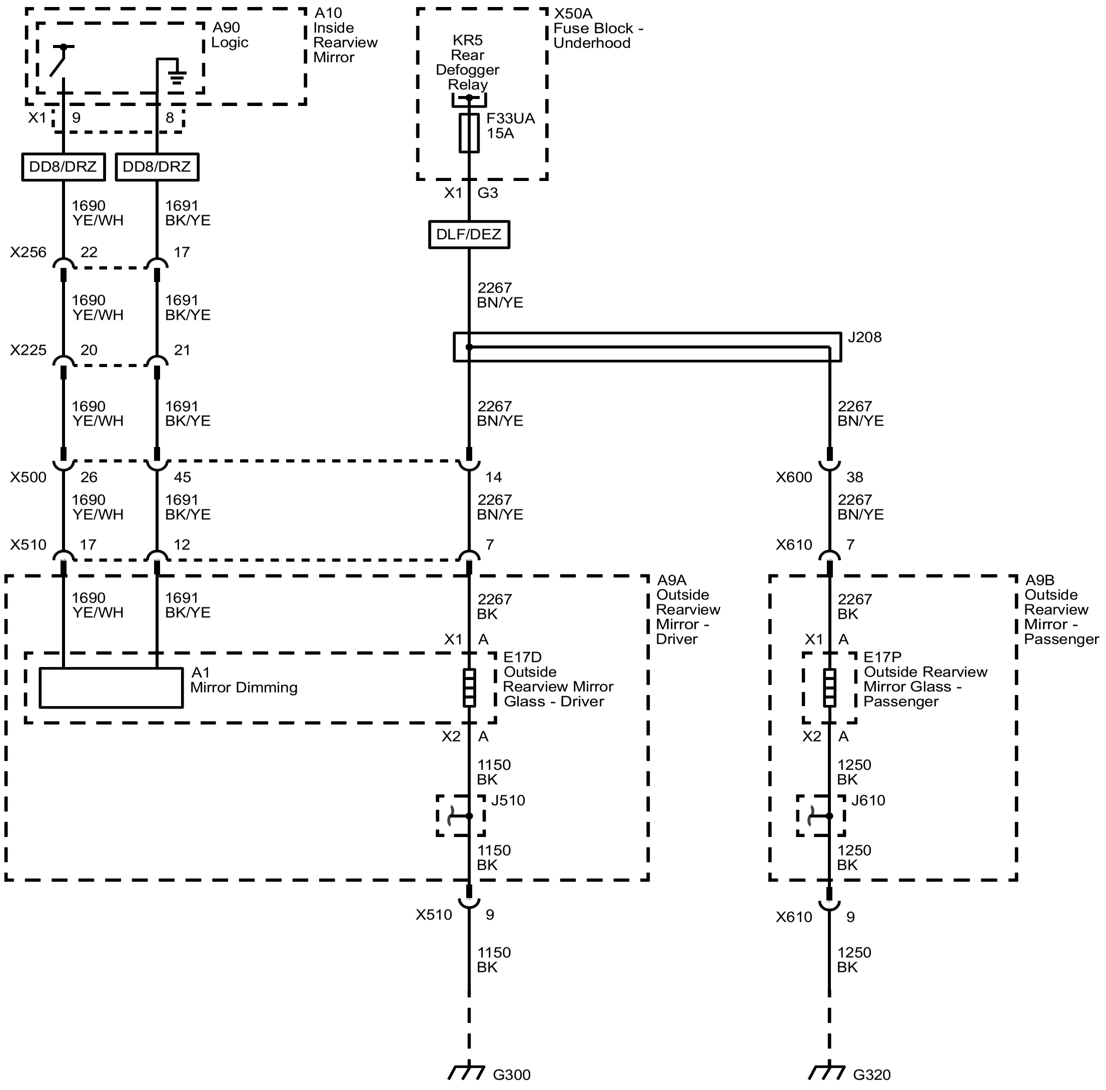
# Outside Rearview Mirror Schematics (Passenger (A45))


4994279
LOC
DESC
B+
X51R Fuse Block - Instrument Panel Right
F2DR 30A
X1
25
1340 RD/WH
47
X600
1340 RD/WH
3
X605
1340 RD/WH
23
B+
24
1250 BK
G320
S52 Outside Rearview Mirror Switch
K40 Seat Memory Control Module
7530 GN/WH
21
5V
S79P Window Switch - Passenger
A90 Logic
22
12
9
6
7
8
3
4
5
3413 YE/WH
3414 BU/GY
3403 VT/WH
3399 YE/RD
3401 BU/YE
3400 BK/GN
3396 GN/BK
3397 YE/VT
3398 WH
X605
26
27
14
21
30
18
16
15
13
3413 YE/WH
3414 BU/GY
3403 VT/WH
3399 YE/RD
3401 BU/YE
3400 BK/GN
3396 GN/BK
3397 YE/VT
3398 WH
X610
15
3
6
10
11
18
1
2
14
3413 YE/WH
3414 BU/GY
3403 VT/WH
3399 YE/RD
3401 BU/YE
3400 BK/GN
3396 GN/BK
3397 YE/VT
3398 WH
A9B Outside Rearview Mirror - Passenger
M77P Outside Rearview Mirror Motor - Passenger
M78P Outside Rearview Mirror Folding Motor - Passenger
M
M
M

## Outside Rearview Mirror Schematics (Position (AXG-A45))


LOC
DESC
4994280
S146 Window/ Outside Rearview Mirror Switch - Driver
24
1150 BK
G300
A9B Outside Rearview Mirror - Passenger
M77P Outside Rearview Mirror Motor - Passenger
R
L
o
4
3396 GN/BK
40
8
1
3
3398 WH
19
7
14
2
3397 YE/VT
41
6
X500
X600
X610
A9A Outside Rearview Mirror - Driver
M77D Outside Rearview Mirror Motor - Driver
6
3389 BN/BK
21
8
3391 YE/BN
28
7
3390 VT/BU
33
X510
M
23
X51R Fuse Block - Instrument Panel Right
F14DR 10A
B+
X1 29
AXG
1940 RD/VT
30
X500
17
X505

# Outside Rearview Mirror Schematics (Dimming (DD8/DRZ) and Heating (DLF/DEZ))


A10
Inside
Rearview
Mirror
A90
Logic
X1 9
8
DD8/DRZ
DD8/DRZ
1690
YE/WH
1691
BK/YE
X256 22
17
X225 20
21
X500 26
45
14
X510 17
12
7
X50A
Fuse Block -
Underhood
KR5
Rear
Defogger
Relay
F33UA
15A
X1 G3
DLF/DEZ
2267
BN/YE
J208
X600 38
X610 7
2267
BK
X1 A
X2 A
A1
Mirror Dimming
E17D
Outside
Rearview Mirror
Glass - Driver
A9A
Outside
Rearview
Mirror -
Driver
E17P
Outside Rearview
Mirror Glass -
Passenger
A9B
Outside
Rearview
Mirror -
Passenger
1150
BK
J510
1250
BK
J610
X510 9
X610 9
G300
G320

4994281

# Description and Operation

## Automatic Day-Night Mirror Description and Operation

### Inside Rearview Mirror with the Automatic Day-Night Feature System Operation

The inside rearview mirror uses 2 photocell sensors. One sensor is the headlight sensor, located on the face side of the mirror. The headlight sensor is used to determine light conditions present at the mirror face. The other sensor is the ambient light sensor, located on the rear of the mirror or windshield side. The ambient light sensor is used to determine the exterior light conditions. With a low exterior light condition detected, and a high light condition from behind the car, at the headlight sensor, the inside rearview mirror will automatically darken the face of the mirror.

In the daytime, the mirror is in a normal state because of the high exterior light condition that is indicated by the ambient light sensor. With the gear selector lever in the REVERSE position and the engine running, backup lamp supply voltage is supplied as an input to the inside rearview mirror. The mirror monitors this input to disable the automatic day-night feature. This allows the driver to see objects in the mirror clearly when backing up, even during the night.

### Driver Outside Rearview Mirror with Automatic Day-Night System Operation (If Equipped)

The automatic day-night feature of the driver outside rearview mirror is controlled by the inside rearview mirror. The inside rearview mirror supplies control and low reference to the driver outside rearview mirror. At night, with the automatic day-night feature enabled, the driver outside rearview mirror will automatically darken with the inside rearview mirror to reduce glare from headlamps behind the vehicle.

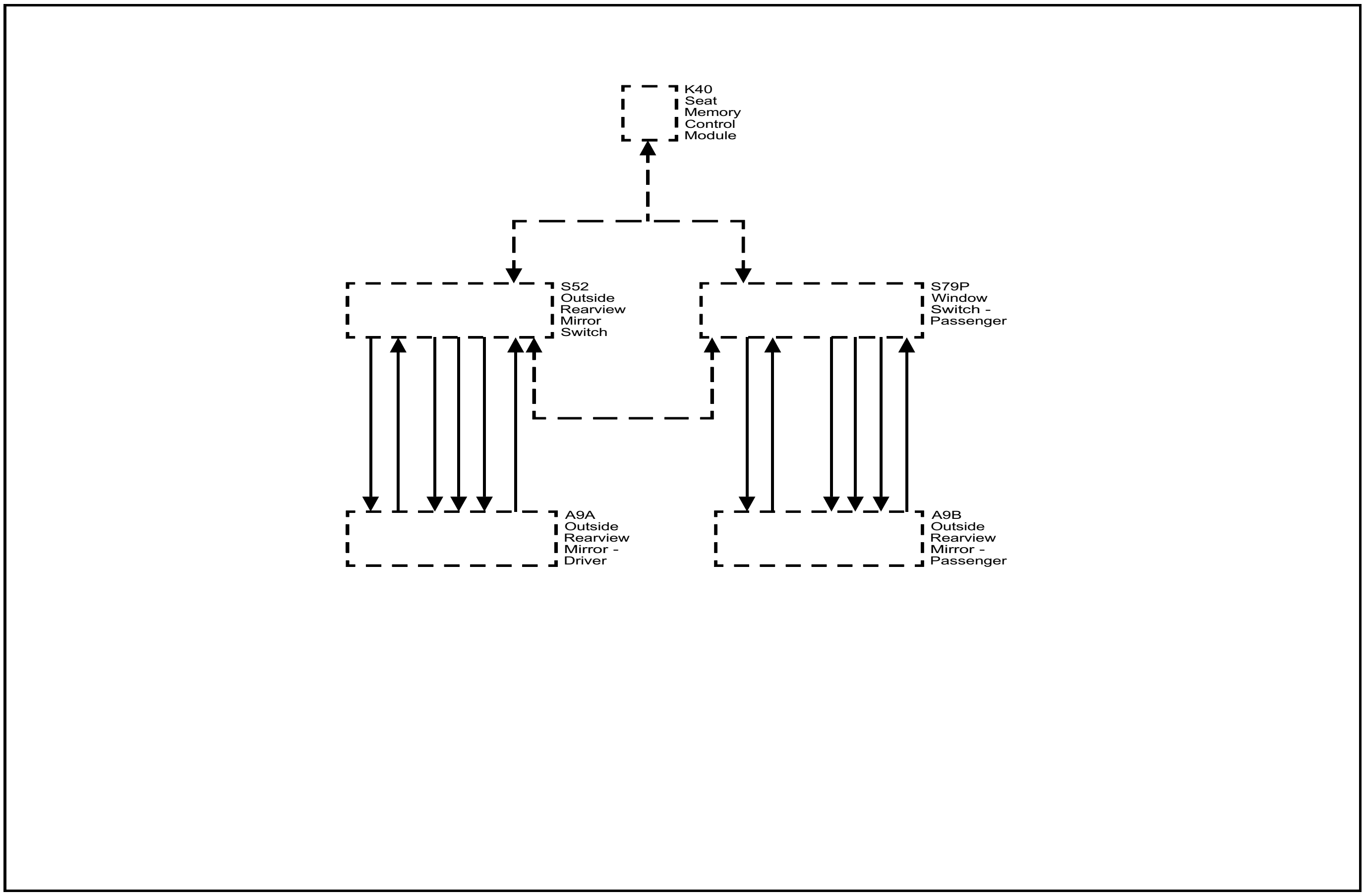
## Outside Mirror Description and Operation (With A45)

### Power Mirror System Components

The power mirror system consists of the following components:

- Memory Seat Control Module
- Outside Rearview Mirror Switch
- Passenger Window Switch
- Driver Outside Rearview Mirror
- Passenger Outside Rearview Mirror

### Power Mirrors with A45 Block Diagram



3520568

## Power Mirror System Controls

The outside mirror switch and passenger window switch are on a serial data circuit with the memory seat control module as the master. The mirror select and directional control switches are inputs to the memory seat module through the serial data circuit. When the memory seat module receives switch inputs from the outside mirror switch, mirror output commands are sent to the appropriate switch through the serial data circuit. The outside mirror switch and passenger window switch control the left and right outside rear view mirrors through bi-directional motor control circuits. The motor control circuits are floating while in an inactive state and the switches will apply power and ground to the control circuits as necessary to move the mirror in the commanded direction.

Mirror position is determined by both horizontal and vertical position sensors in each of the power mirrors. The outside mirror switch and passenger window switch supply a 5 V reference, low reference, and horizontal and vertical position signal circuits to these sensors. The signal circuits are referenced from 5 V by the switches and the signal circuit voltage levels represent the mirror positions. The mirror positions are sent to the memory seat module through the serial data circuit where they are stored for memory mirror operation. When the memory seat module receives a memory recall command, the memory seat module will send the go to position commands to the outside mirror switch and passenger window switch. The switches will then drive the appropriate mirror motors to the commanded position sensor settings.

## Heated Mirrors

The heated mirrors are controlled through the rear defog relay. Whenever the rear window defogger is turned on battery voltage is supplied to the mirror heater elements through the left and right mirror heater element control circuits.

# Outside Mirror Description and Operation (Without A45)

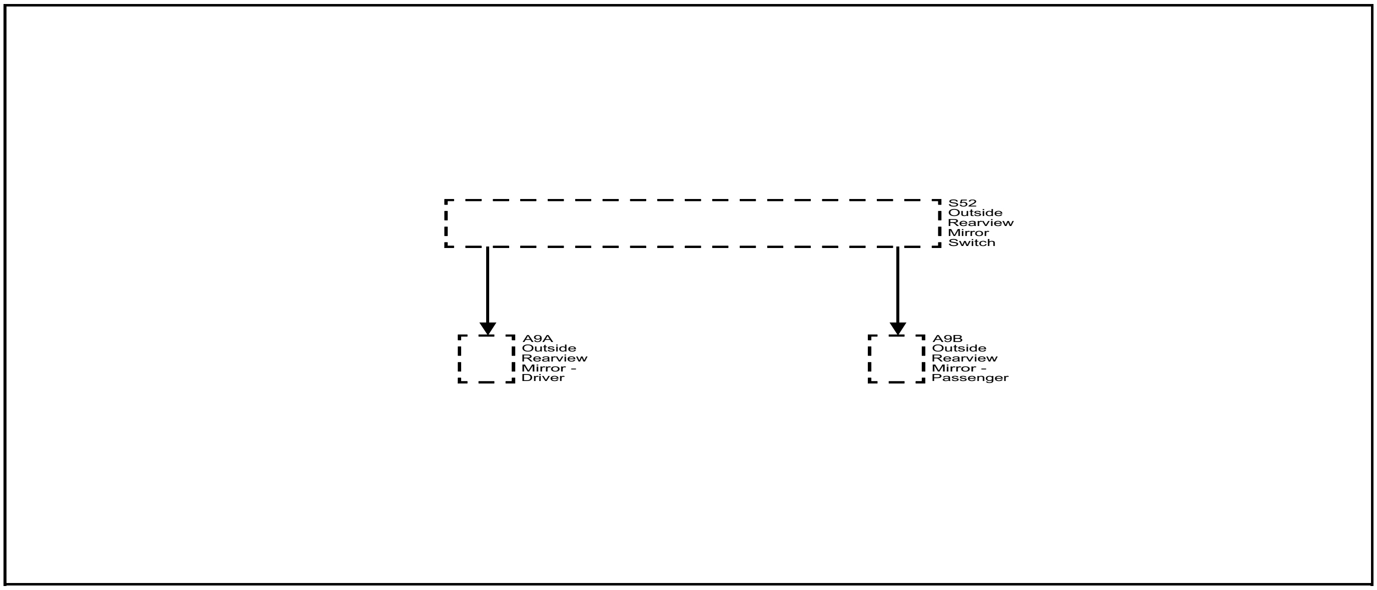
## Power Mirror System Components

The power mirror system consists of the following components:

- Mirror direction switch — Controls the left, right, up and down movements of the mirrors
- Mirror select switch — Allows the operator to select the mirror to be moved
- Left outside mirror — Contains both the horizontal and vertical mirror motors
- Right outside mirror — Contains both the horizontal and vertical mirror motors

Each of the outside power mirrors contains 2 motors. The up-down motor operates the vertical directions and the left-right motor operates the horizontal directions. Each of the power mirror motors are internally circuit breaker protected.

### Power Mirrors Without A45 Block Diagram


S52 Outside Rearview Mirror Switch
A9A Outside Rearview Mirror - Driver
A9B Outside Rearview Mirror - Passenger
3270441

## Power Mirror System Controls

The outside mirror switch incorporates a mirror select switch and a 4 position mirror direction switch.

The mirror select switch allows the driver to select the mirror to be moved by turning the switch to L position enabling the left outside mirror or turning the switch to R position enabling the right outside mirror.

The mirror direction switch is a 4 position switch that allows the operator to move the selected mirror up, down, left or right.

## Power Mirror System Operation

The outside mirror switch receives power through the battery positive voltage circuit from the underhood fuse block. The outside mirror switch also receives a constant ground.

The 4 positions of the direction switch have multiple switch contacts. When not in use, the directional contacts are isolated from any circuit. Each of the contacts are connected to opposing sides of the appropriate mirror motors through the selector switch. The selector switch interrupts or completes these circuits depending on the position of the selector switch, L or R.

If the mirror select switch is placed in the L position and the up switch is pressed, battery voltage will be supplied to the driver outside mirror vertical motor through the driver mirror motor up control circuit and return to the mirror switch through the driver mirror motor left/down control circuit, then to ground and the mirror will move up. If the down switch is pressed, the driver mirror motor left/down control circuit supplies battery voltage and the driver mirror motor up control circuit completes the path to the mirror switch, then to ground and the mirror will move down.

The remainder of the mirror functions operate in the same manner as described above. Placing the mirror control switch in opposing positions, left/right or up/down, will reverse the voltage polarity to the mirror motor, utilizing the same circuits and the mirror will move accordingly.

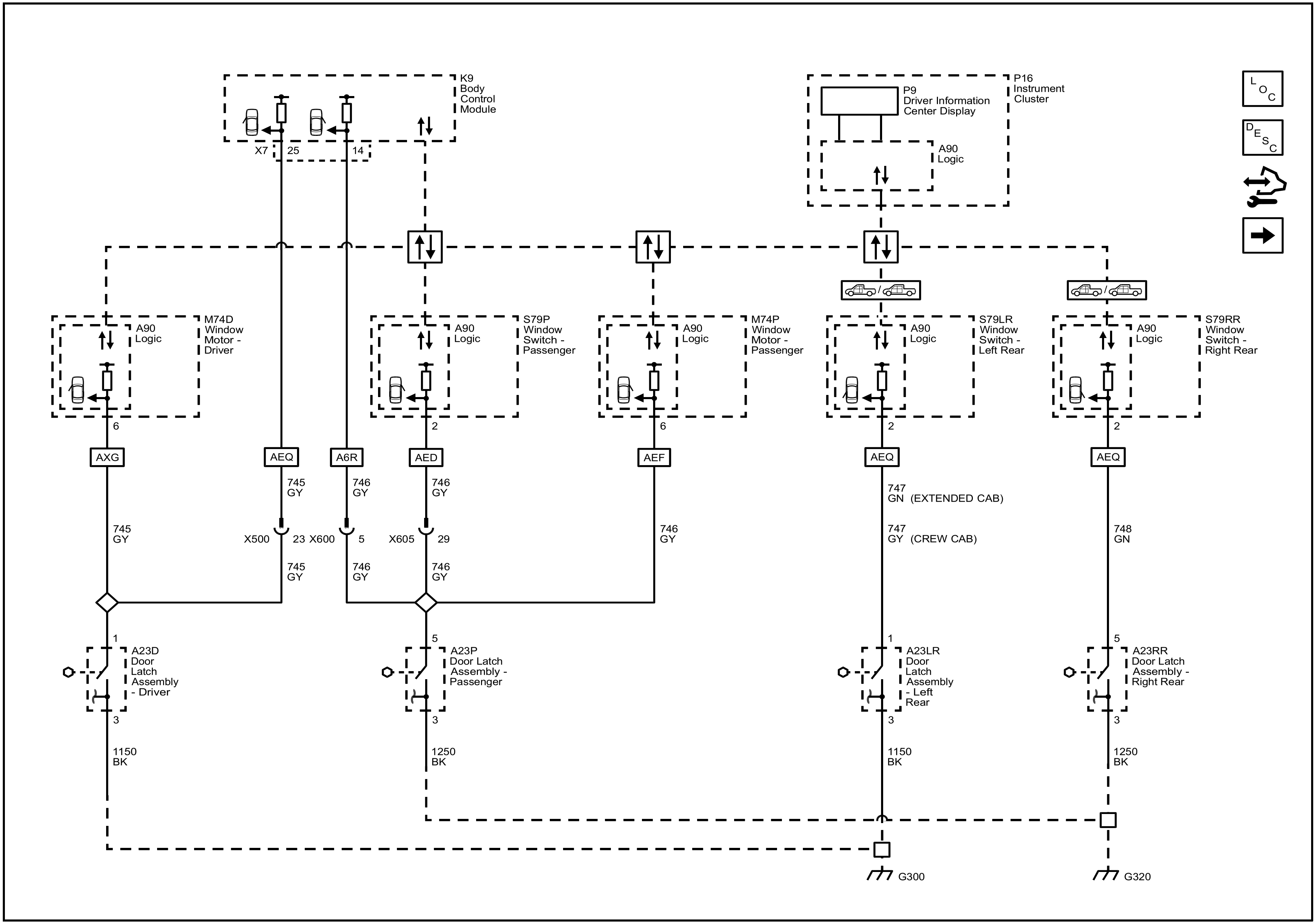
## Heated Mirrors

The heated mirrors are controlled through the rear defog relay. Whenever the rear window defogger is turned ON, battery voltage is supplied to the mirror heater elements through the left and right mirror heater element control circuits.

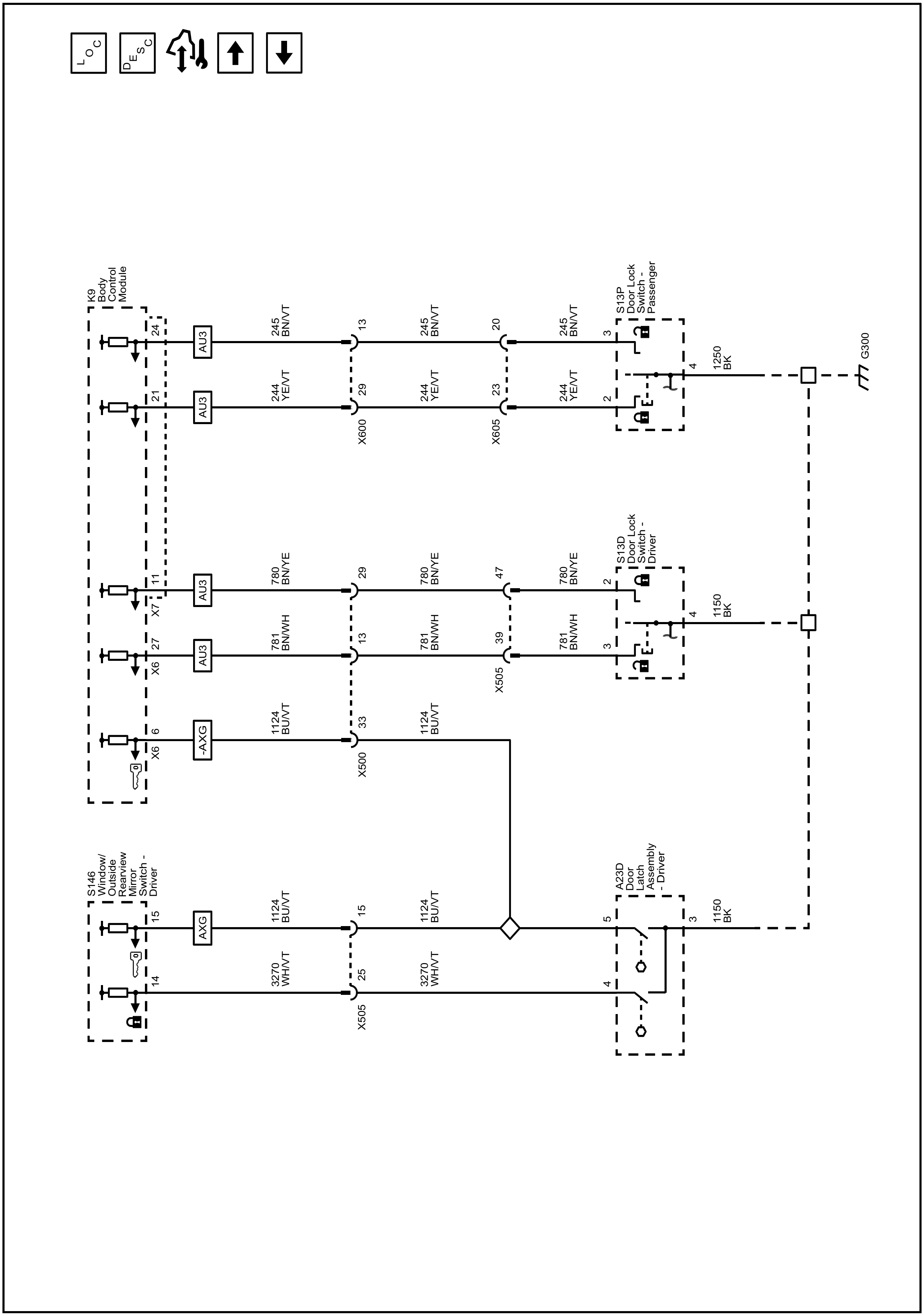
# Vehicle Access

## Schematic and Routing Diagrams

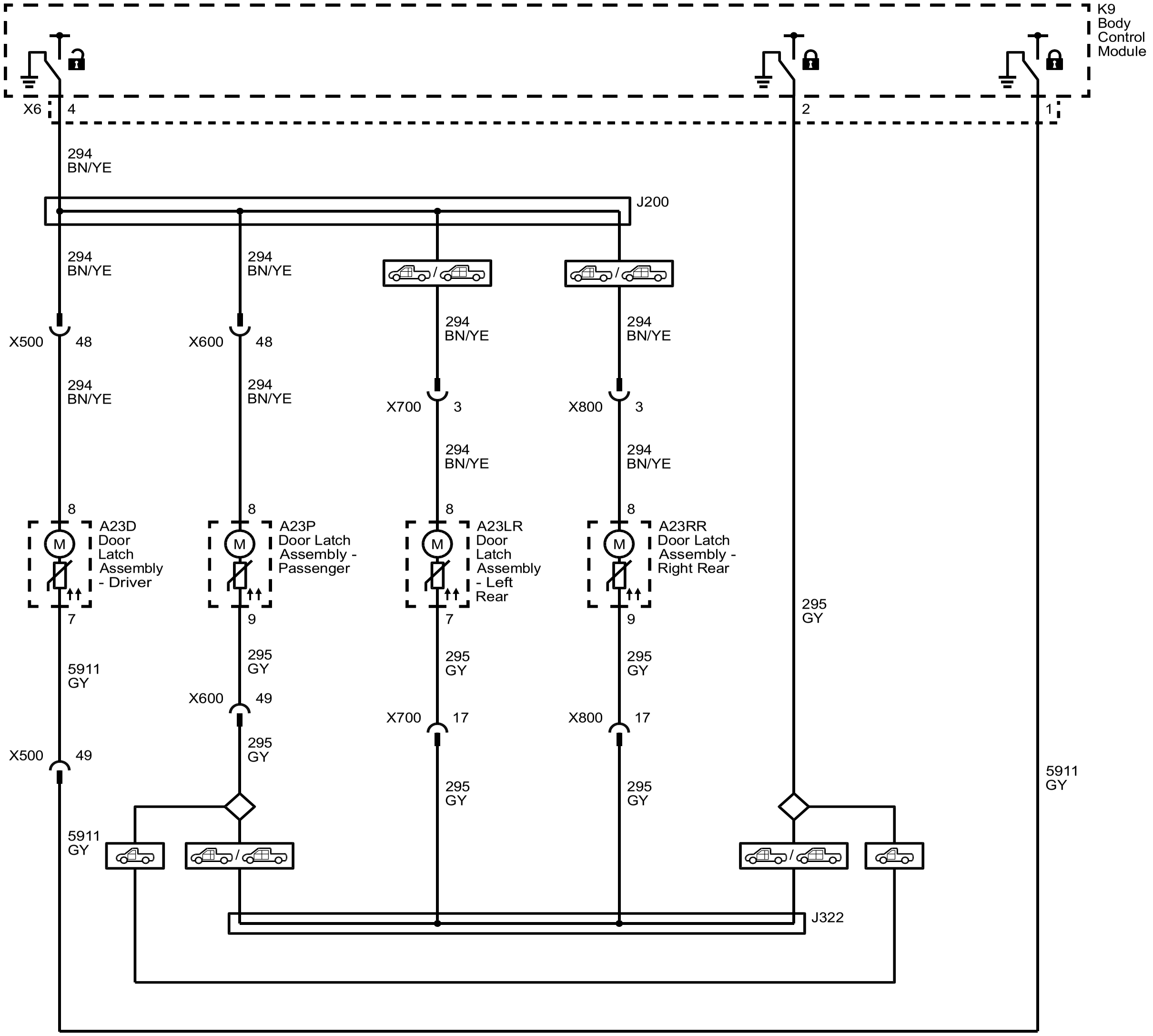
## Door Lock/Indicator Schematics (Ajar Switches)


LOC
DESC
K9
Body
Control
Module
X7
25
14
P16
Instrument
Cluster
P9
Driver Information
Center Display
A90
Logic
M74D
Window
Motor -
Driver
S79P
Window
Switch -
Passenger
M74P
Window
Motor -
Passenger
S79LR
Window
Switch -
Left Rear
S79RR
Window
Switch -
Right Rear
6
2
6
2
2
AXG
AEQ
A6R
AED
AEF
AEQ
AEQ
745
GY
746
GY
X500
23
X600
5
X605
29
747
GN (EXTENDED CAB)
747
GY (CREW CAB)
748
GN
1
A23D
Door
Latch
Assembly
- Driver
3
5
A23P
Door Latch
Assembly -
Passenger
A23LR
Door
Latch
Assembly
- Left
Rear
A23RR
Door Latch
Assembly -
Right Rear
1150
BK
1250
BK
G300
G320
4994282

# Door Lock/Indicator Schematics (Controls and Lock Indicators)

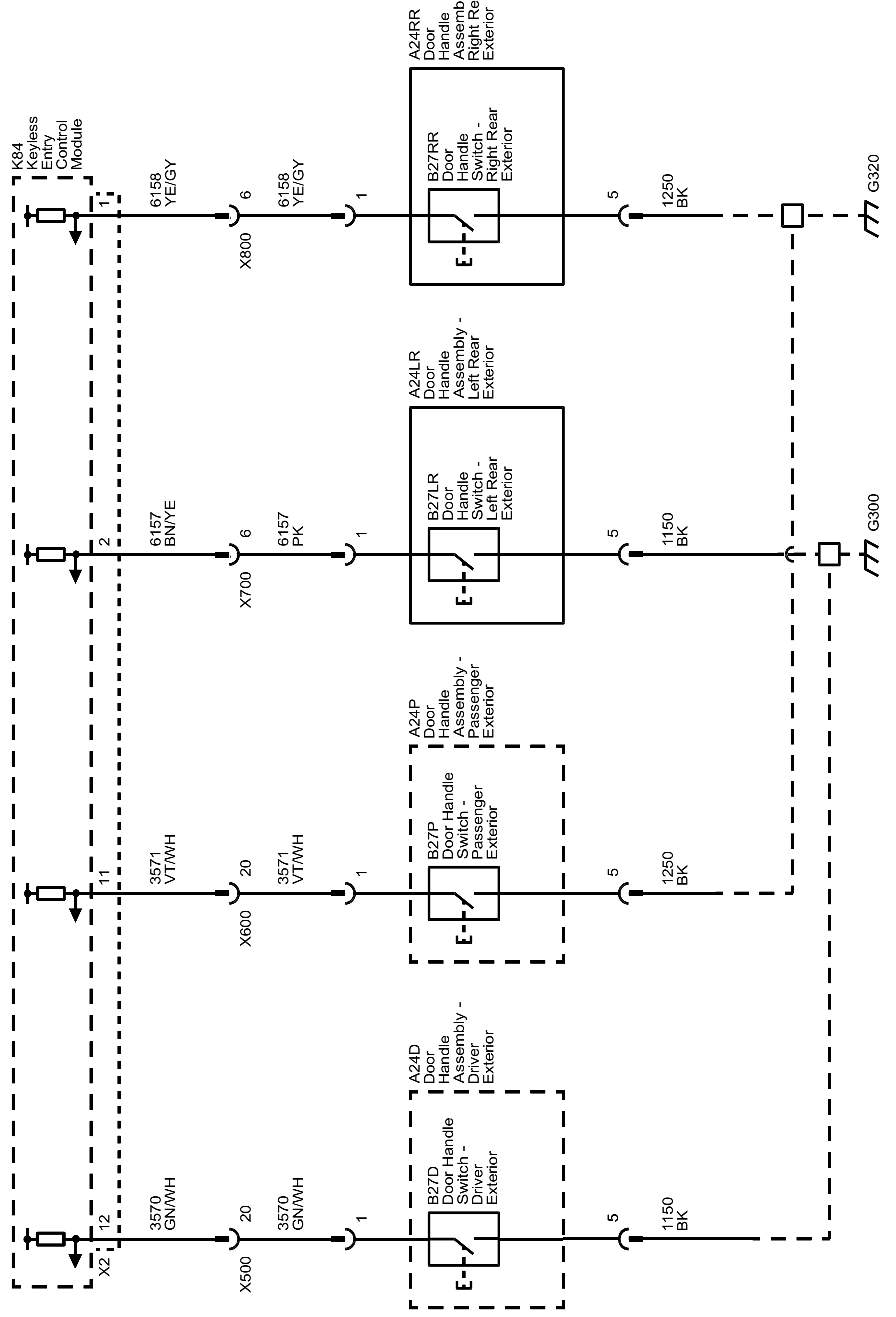

4994283
LOC
DESC
S146 Window/ Outside Rearview Mirror Switch - Driver
15
14
AXG
1124 BU/VT
3270 WH/VT
15
25
X505
K9 Body Control Module
X6 6
X6 27
X7 11
21
24
-AXG
AU3
AU3
AU3
AU3
1124 BU/VT
781 BN/WH
780 BN/YE
244 YE/VT
245 BN/VT
33
13
29
29
13
X500
X600
39
47
23
20
X505
X605
A23D Door Latch Assembly - Driver
5
4
3
1150 BK
S13D Door Lock Switch - Driver
3
2
4
1150 BK
S13P Door Lock Switch - Passenger
2
3
4
1250 BK
G300

## Door Lock/Indicator Schematics (Actuators)

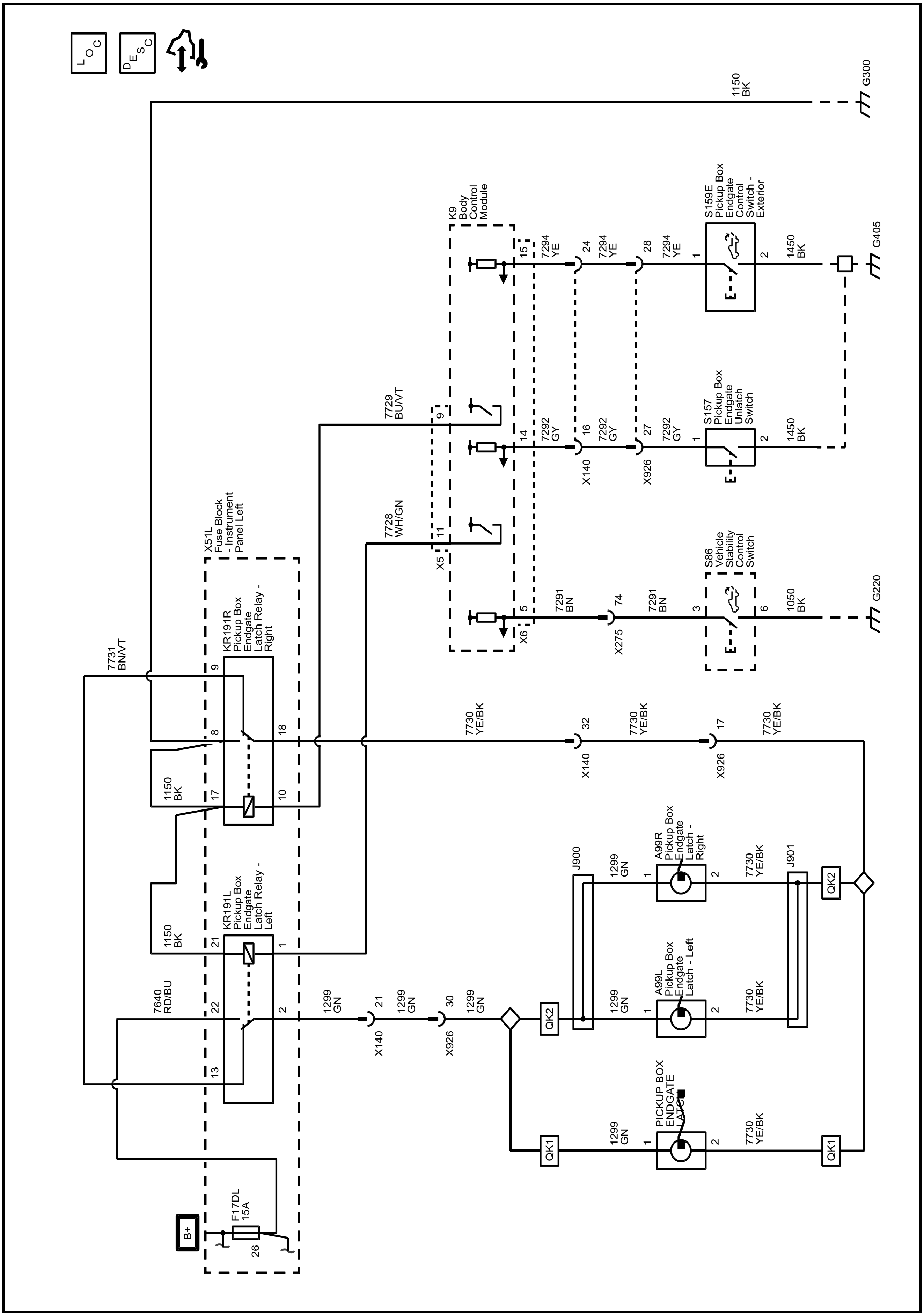

K9
Body
Control
Module
X6
4
2
1
294
BN/YE
J200
X500
48
X600
48
X700
3
X800
3
8
A23D
Door
Latch
Assembly
- Driver
A23P
Door Latch
Assembly -
Passenger
A23LR
Door
Latch
Assembly
- Left
Rear
A23RR
Door Latch
Assembly -
Right Rear
7
9
5911
GY
295
GY
X600
49
X700
17
X800
17
X500
49
J322

4994286

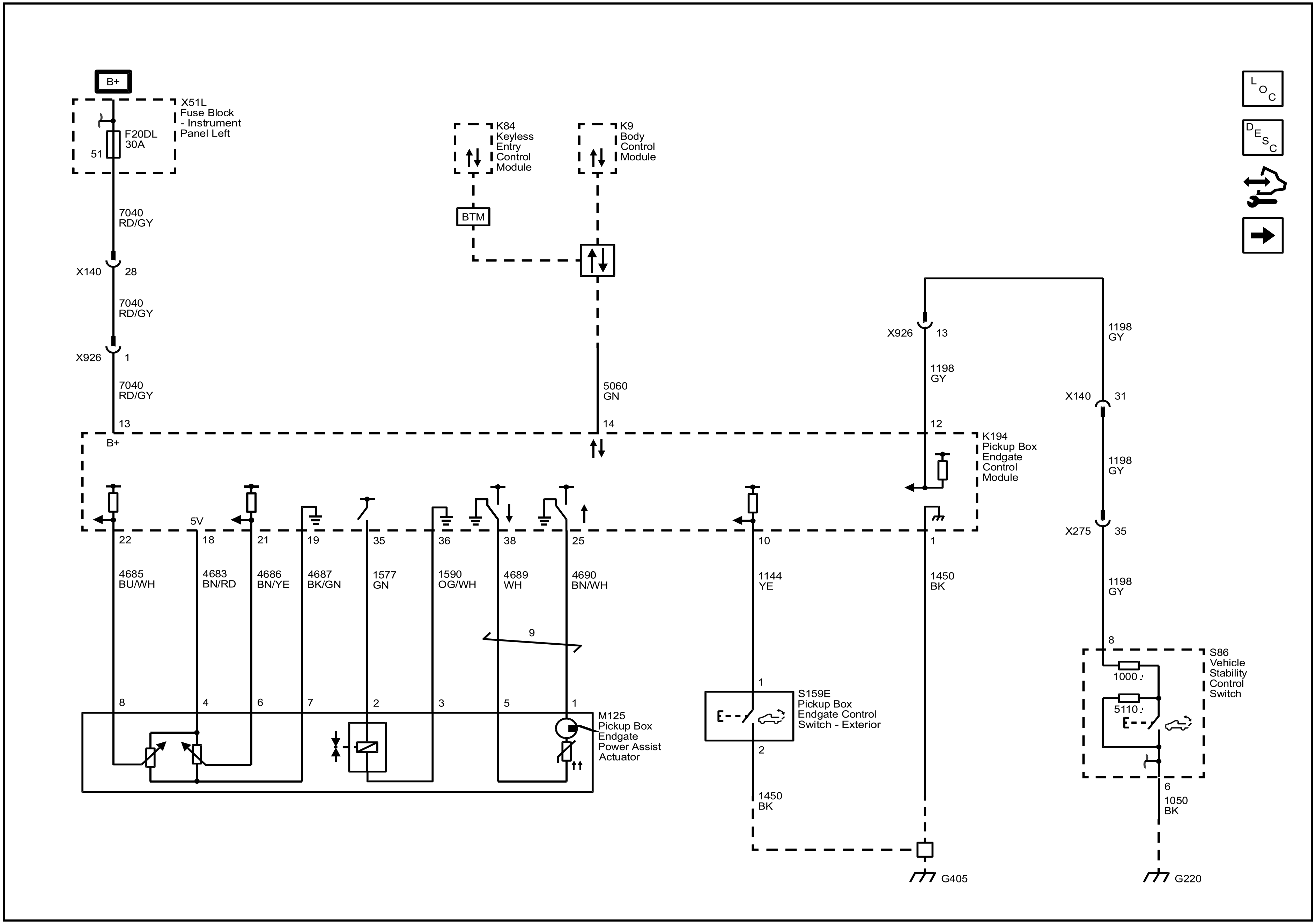
## Door Lock/Indicator Schematics (Handle Switches)


4994289
K84 Keyless Entry Control Module
X2
1
2
11
12
6158 YE/GY
6157 BN/YE
3571 VT/WH
3570 GN/WH
X800
X700
X600
X500
6
6
20
20
6158 YE/GY
6157 PK
3571 VT/WH
3570 GN/WH
1
A24RR Door Handle Assembly - Right Rear Exterior
B27RR Door Handle Switch - Right Rear Exterior
A24LR Door Handle Assembly - Left Rear Exterior
B27LR Door Handle Switch - Left Rear Exterior
A24P Door Handle Assembly - Passenger Exterior
B27P Door Handle Switch - Passenger Exterior
A24D Door Handle Assembly - Driver Exterior
B27D Door Handle Switch - Driver Exterior
5
1250 BK
1150 BK
1250 BK
1150 BK
G320
G300

## Release Systems Schematics (Endgate Release (QT5))

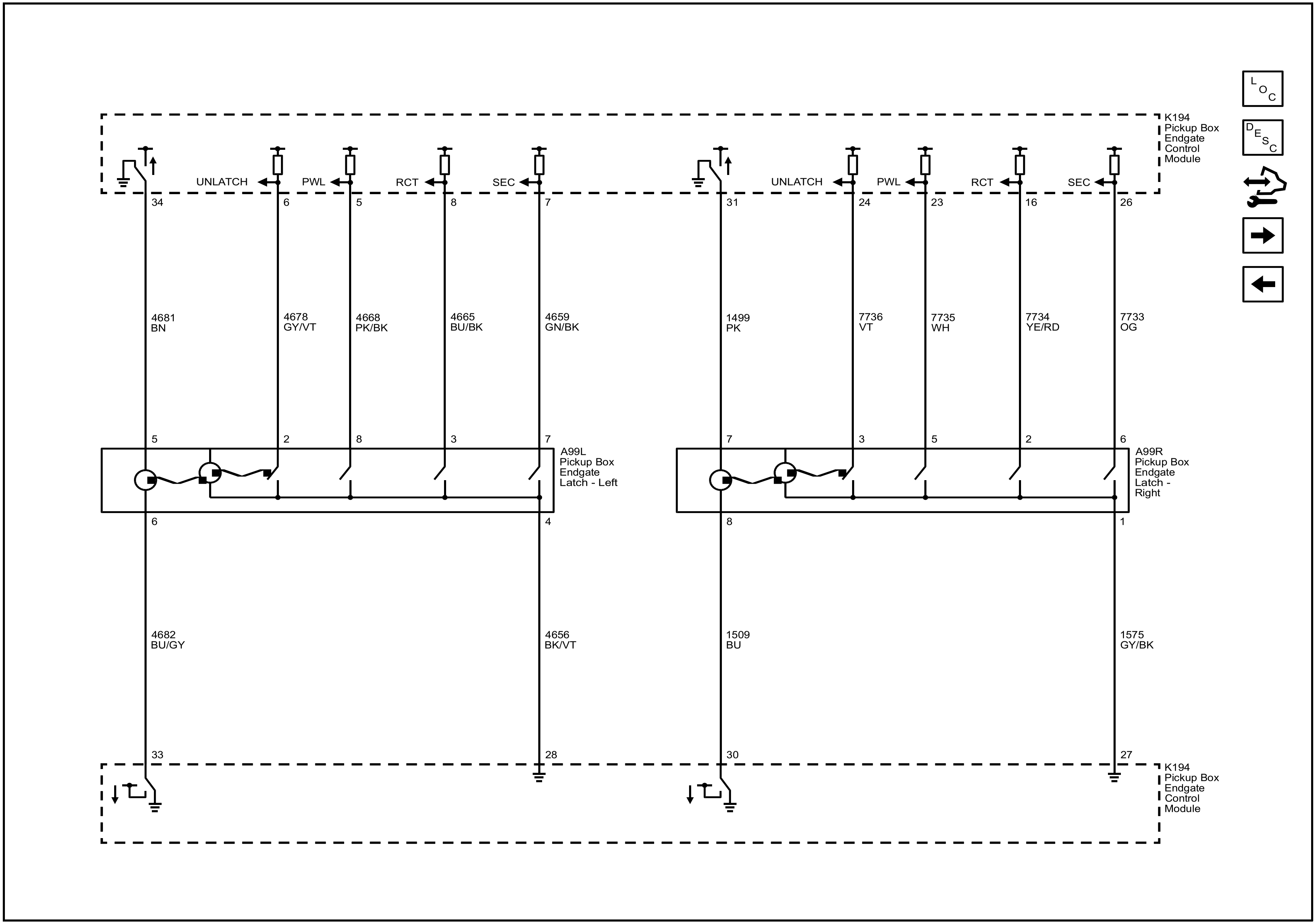

4994297
LOC
DESC
1150 BK
G300
K9 Body Control Module
S159E Pickup Box Endgate Control Switch - Exterior
15
7294 YE
24
7294 YE
28
7294 YE
1
2
1450 BK
G405
7729 BU/VT
9
14
7292 GY
16
7292 GY
27
7292 GY
S157 Pickup Box Endgate Unlatch Switch
1
2
1450 BK
X140
X926
X51L Fuse Block - Instrument Panel Left
7728 WH/GN
11
X5
S86 Vehicle Stability Control Switch
5
7291 BN
74
7291 BN
3
6
1050 BK
G220
X6
X275
7731 BN/VT
KR191R Pickup Box Endgate Latch Relay - Right
9
8
18
17
10
1150 BK
7730 YE/BK
32
7730 YE/BK
17
7730 YE/BK
X140
X926
J900
1299 GN
A99R Pickup Box Endgate Latch - Right
1
2
7730 YE/BK
J901
QK2
KR191L Pickup Box Endgate Latch Relay - Left
1150 BK
21
1
7640 RD/BU
22
2
13
1299 GN
21
1299 GN
30
1299 GN
X140
X926
QK2
1299 GN
A99L Pickup Box Endgate Latch - Left
1
2
7730 YE/BK
PICKUP BOX ENDGATE LATCH
1299 GN
1
2
7730 YE/BK
QK1
QK1
B+
F17DL 15A
26

# Endgate Schematics (Power Endgate Controls (QT6))

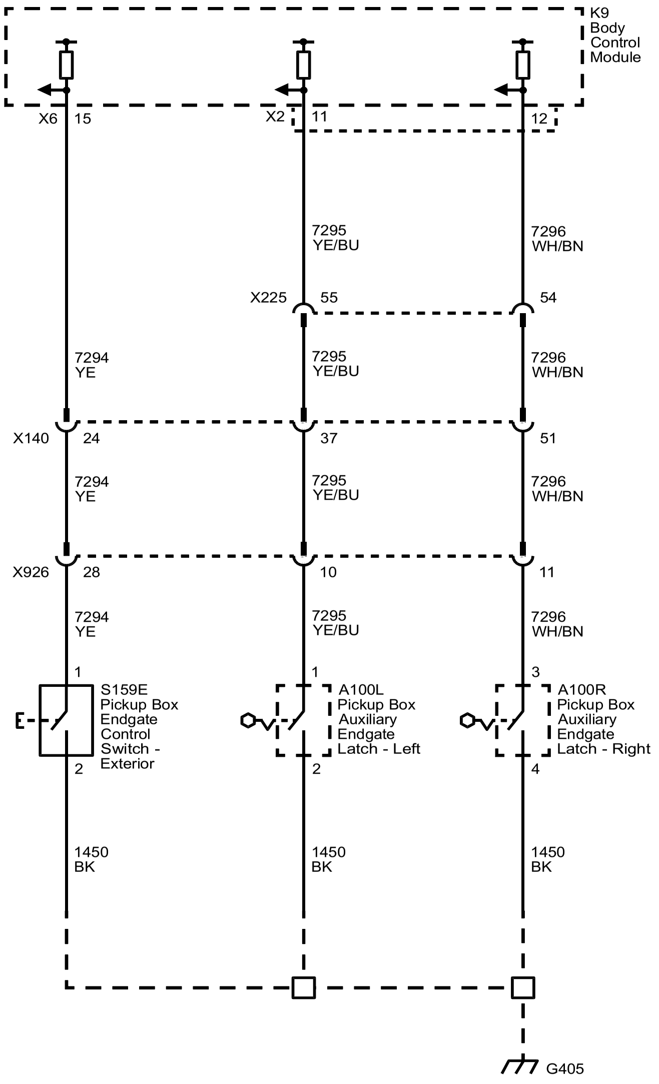

B+
X51L
Fuse Block
- Instrument
Panel Left
F20DL
30A
51
7040
RD/GY
X140
28
7040
RD/GY
X926
1
7040
RD/GY
13
B+
K84
Keyless
Entry
Control
Module
BTM
K9
Body
Control
Module
5060
GN
14
X926
13
1198
GY
12
K194
Pickup Box
Endgate
Control
Module
1198
GY
X140
31
1198
GY
X275
35
1198
GY
8
S86
Vehicle
Stability
Control
Switch
1000 Ω
5110 Ω
6
1050
BK
G220
5V
22
4685
BU/WH
18
4683
BN/RD
21
4686
BN/YE
19
4687
BK/GN
35
1577
GN
36
1590
OG/WH
38
4689
WH
25
4690
BN/WH
9
8
4
6
7
2
3
5
1
M125
Pickup Box
Endgate
Power Assist
Actuator
10
1144
YE
1
S159E
Pickup Box
Endgate Control
Switch - Exterior
2
1450
BK
1
1450
BK
G405

4994291

## Endgate Schematics (Power Endgate Latches (QT6))

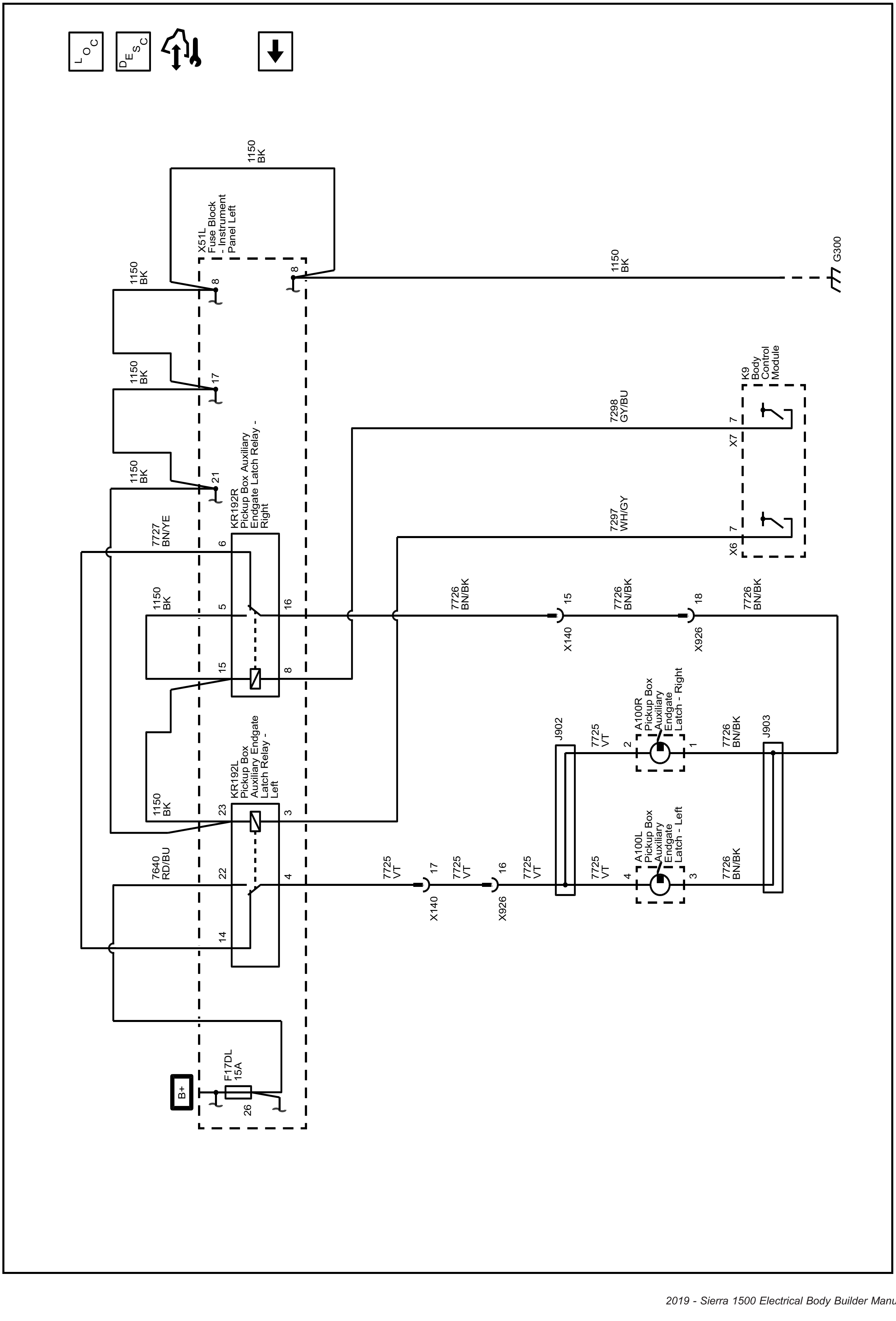

K194
Pickup Box
Endgate
Control
Module
UNLATCH
PWL
RCT
SEC
34
6
5
8
7
31
24
23
16
26
4681
BN
4678
GY/VT
4668
PK/BK
4665
BU/BK
4659
GN/BK
1499
PK
7736
VT
7735
WH
7734
YE/RD
7733
OG
A99L
Pickup Box
Endgate
Latch - Left
A99R
Pickup Box
Endgate
Latch -
Right
4682
BU/GY
4656
BK/VT
1509
BU
1575
GY/BK
33
28
30
27
4994292

## Endgate Schematics (Auxiliary Endgate Latch Controls and Switches (QK2))


K9
Body
Control
Module
X6 15
X2 11
12
7295
YE/BU
7296
WH/BN
X225 55
54
7294
YE
7295
YE/BU
7296
WH/BN
X140 24
37
51
7294
YE
7295
YE/BU
7296
WH/BN
X926 28
10
11
7294
YE
7295
YE/BU
7296
WH/BN
1
S159E
Pickup Box
Endgate
Control
Switch -
Exterior
2
1
A100L
Pickup Box
Auxiliary
Endgate
Latch - Left
2
3
A100R
Pickup Box
Auxiliary
Endgate
Latch - Right
4
1450
BK
1450
BK
1450
BK
G405

4994294

## Endgate Schematics (Auxiliary Endgate Latch Motors (QK2))


4994299
LOC
DESC
X51L Fuse Block - Instrument Panel Left
1150 BK
8
8
17
21
G300
K9 Body Control Module
7298 GY/BU
X7 7
7297 WH/GY
X6 7
KR192R Pickup Box Auxiliary Endgate Latch Relay - Right
7727 BN/YE
6
5
16
15
8
7726 BN/BK
X140 15
X926 18
KR192L Pickup Box Auxiliary Endgate Latch Relay - Left
23
3
22
4
14
7640 RD/BU
7725 VT
X140 17
X926 16
J902
A100R Pickup Box Auxiliary Endgate Latch - Right
2
1
J903
A100L Pickup Box Auxiliary Endgate Latch - Left
4
3
F17DL 15A
26
B+

# Description and Operation

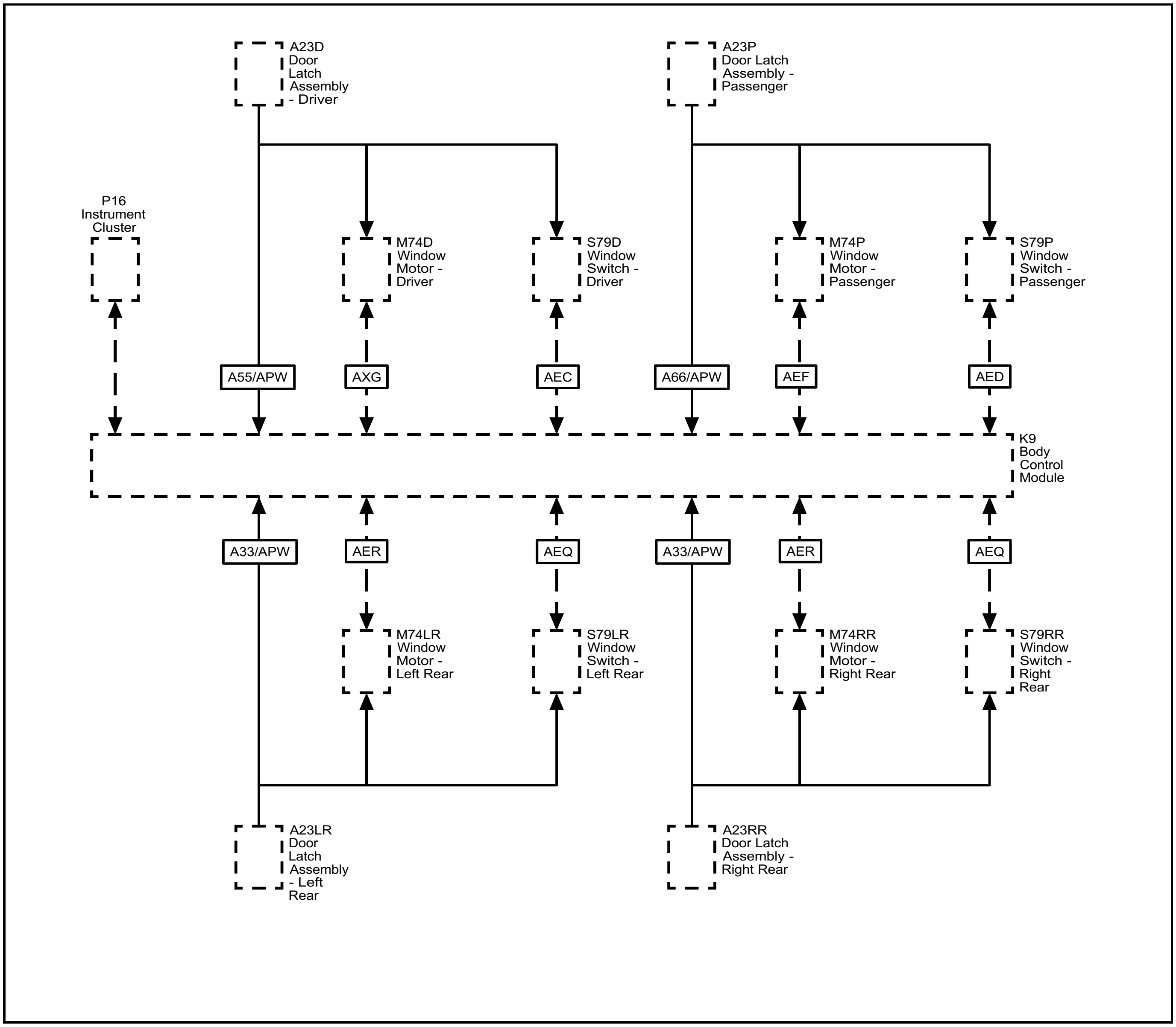
## Door Ajar Indicator Description and Operation

### Door Ajar Indicator System Components

The door ajar indicator system consists of the following components:

- Body control module
- Instrument cluster
- Driver door latch
- Passenger door latch
- Left rear door latch
- Right rear door latch
- Driver window motor (AXG)
- Driver window switch (AEC)
- Passenger window motor (AEF)
- Passenger window switch (AED)
- Left rear window motor (AER)
- Left rear window switch ( AEQ)
- Right rear window motor (AER)
- Right rear window switch (AEQ)

**Door Ajar Indicator Block Diagram**


A23D Door Latch Assembly - Driver
A23P Door Latch Assembly - Passenger
P16 Instrument Cluster
M74D Window Motor - Driver
S79D Window Switch - Driver
M74P Window Motor - Passenger
S79P Window Switch - Passenger
A55/APW
AXG
AEC
A66/APW
AEF
AED
K9 Body Control Module
A33/APW
AER
AEQ
A33/APW
AER
AEQ
M74LR Window Motor - Left Rear
S79LR Window Switch - Left Rear
M74RR Window Motor - Right Rear
S79RR Window Switch - Right Rear
A23LR Door Latch Assembly - Left Rear
A23RR Door Latch Assembly - Right Rear
3556440

### Door Ajar System

Depending upon if the vehicle is equipped with express up/down power windows, express down only power windows, power windows without any express functions or manual crank windows affects how the driver and passenger door ajar signal circuits are configured and monitored.

## Driver, Passenger and Rear Door Ajar (AXG, AEF and AER)

The window motors provide a 12V signal to the respective door ajar switch within the door latch to indicate the status of the door. When the door is open, the contract within the ajar switch closes providing a ground part for the signal circuit. The window motor will detect the voltage drop in the ajar signal circuit and will send a serial data message to the body control module. The body control module will then send a message to the instrument cluster which will illuminate the door ajar icon.

## Driver, Passenger and Rear Doors Ajar (AEC, AED and AEQ)

The driver, passenger and rear window switches provide a 12V signal to the respective door ajar switch within the door latch to indicate the status of the door. When the door is open, the contract within the ajar switch closes providing a ground part for the signal circuit. The window switch will detect the voltage drop in the ajar signal circuit and will send a serial data message to the body control module. The body control module will then send a message to the instrument cluster which will illuminate the door ajar icon.

## Driver, Passenger and Rear Doors Ajar (A55, A66, A33 or Manual Crank Windows)

The body control module provides a 12V signal to each door ajar switch within the door latch to indicate the status of the door. When the door is open, the contract within the ajar switch closes providing a ground part for the signal circuit. The body control module will detect the voltage drop in the ajar signal circuit and will send a message to the instrument cluster which will illuminate the door ajar icon

# Endgate Description and Operation (QT5 Without MultiPro Tailgate)

## Endgate Release System Components

- Body control module (BCM)
- Pickup box endgate control switch-interior (Part of the instrument panel multifunction switch)
- Pickup box endgate control switch-exterior
- Pickup box endgate unlatch actuator
- Pickup box endgate unlatch relay

## Endgate Release Operation (Without MutiPro Tailgate Option)

### Interior Endgate Release Switch

The body control module monitors the voltage level of the endgate unlatch signal circuit so that when the switch is pressed contacts within the switch closes providing a ground path for the endgate unlatch signal circuit, the voltage within the signal circuit is pulled low, the body control module will detect the voltage drop and if the passenger doors are unlocked, will energize the pickup box endgate unlatch relay.

### Exterior Endgate Release Switch

The body control module monitors the status of the vehicle doors, if the doors are locked the body control module will ignore the request from the exterior pickup box endgate control switch. If the passenger doors have been commanded to unlock, pressing the exterior pickup box endgate control switch will close contacts within the switch and provide a ground path for the endgate unlatch signal circuit, the body control module will detect the voltage drop and will energize the pickup box endgate unlatch relay.

If the vehicle has been equipped with the passive keyless entry system and the keyless entry transmitter is within 3 feet (1 meter) of the endgate, pressing the exterior pickup box endgate control switch will also function in the same manner but without unlocking the passenger doors. Refer to Keyless Entry System Description and Operation for more information on the passive keyless entry system.

### Pickup Box Endgate Unlatch actuator

When body control module receives a endgate release command from the exterior pickup box endgate control switch, the body control module applies brief pulse of voltage to the pickup box endgate unlatch relay control circuit, which energizes the coil side of the relay. The switch side of the pickup box endgate unlatch relay then momentarily closes, supplying a brief pulse of battery positive voltage to the pickup box endgate unlatch actuator. The pickup box endgate unlatch actuator is continuously grounded and when it receives the voltage pulse, it will become energized and the latch will activate releasing the endgate so that it may be manually lowered to an open position.

# Endgate Description and Operation (QT5 With MultiPro Tailgate)

## Endgate Release System Components

- Body control module (BCM)
- Pickup box endgate control switch-interior (Part of the instrument panel multifunction switch)
- Pickup box endgate control switch-exterior
- Left pickup box endgate latch
- Right pickup box endgate latch
- Left pickup box auxiliary endgate latch
- Right pickup box auxiliary endgate latch
- Left pickup box endgate latch relay
- Right pickup box endgate latch relay
- Left pickup box auxiliary endgate latch relay
- Right pickup box auxiliary endgate latch relay

## Endgate Release Operation (With MutiPro Tailgate Option)

### Interior Endgate Release Switch

The body control module monitors the voltage level of the endgate unlatch signal circuit so that when the switch is pressed contacts within the switch closes providing a ground path for the endgate unlatch signal circuit, the voltage within the signal circuit is pulled low, the body control module will detect the voltage drop and if the passenger doors are unlocked, will energize the left pickup box endgate latch relay and right pickup box endgate latch relay.

### Exterior Endgate Release Switch

The body control module monitors the status of the vehicle doors, if the doors are locked the body control module will ignore the request from the exterior pickup box endgate control switch. If the passenger doors have been commanded to unlock, pressing the appropriate exterior pickup box endgate control switch will close contacts within the switch and provide a ground path for the major or minor endgate unlatch signal circuit, the body control module will detect the voltage drop and will energize the appropriate pickup box endgate latch relays.

If the vehicle has been equipped with the passive keyless entry system and the keyless entry transmitter is within 3 feet (1 meter) of the endgate, pressing the exterior pickup box endgate control switch will also function in the same manner but without unlocking the passenger doors. Refer to Keyless Entry System Description and Operation for more information on the passive keyless entry system.

### Major Pickup Box Endgate

**Note:** The auxiliary pickup box endgate must be in the latched position before commanding the major pickup box endgate to release. The body control module will disable the major pickup box endgate release function if the auxiliary pickup box endgate is open or ajar.

When body control module receives a major endgate release command from the exterior pickup box endgate control switch, the body control module applies brief pulse of voltage to the left and right pickup box endgate latch relay control circuits, which energizes the coil side of the relays. The switch side of the left and right pickup box endgate latch relay then momentarily closes, supplying a brief pulse of battery positive voltage to the left and right pickup box endgate latches. The left and right pickup box endgate latches will become energized and the latches will activate releasing the major endgate so that it may be manually lowered to an open position.

### Minor Pickup Box Endgate

When body control module receives a major endgate release command from the exterior pickup box endgate control switch, the body control module applies brief pulse of voltage to the left and right pickup box auxiliary endgate latch relay control circuits, which energizes the coil side of the relays. The switch side of the left and right pickup box auxiliary endgate latch relay then momentarily closes, supplying a brief pulse of battery positive voltage to the left and right pickup box auxiliary endgate latches. The left and right pickup box auxiliary endgate latches will become energized and the latches will activate releasing the minor endgate so that it may be manually lowered to an open position.

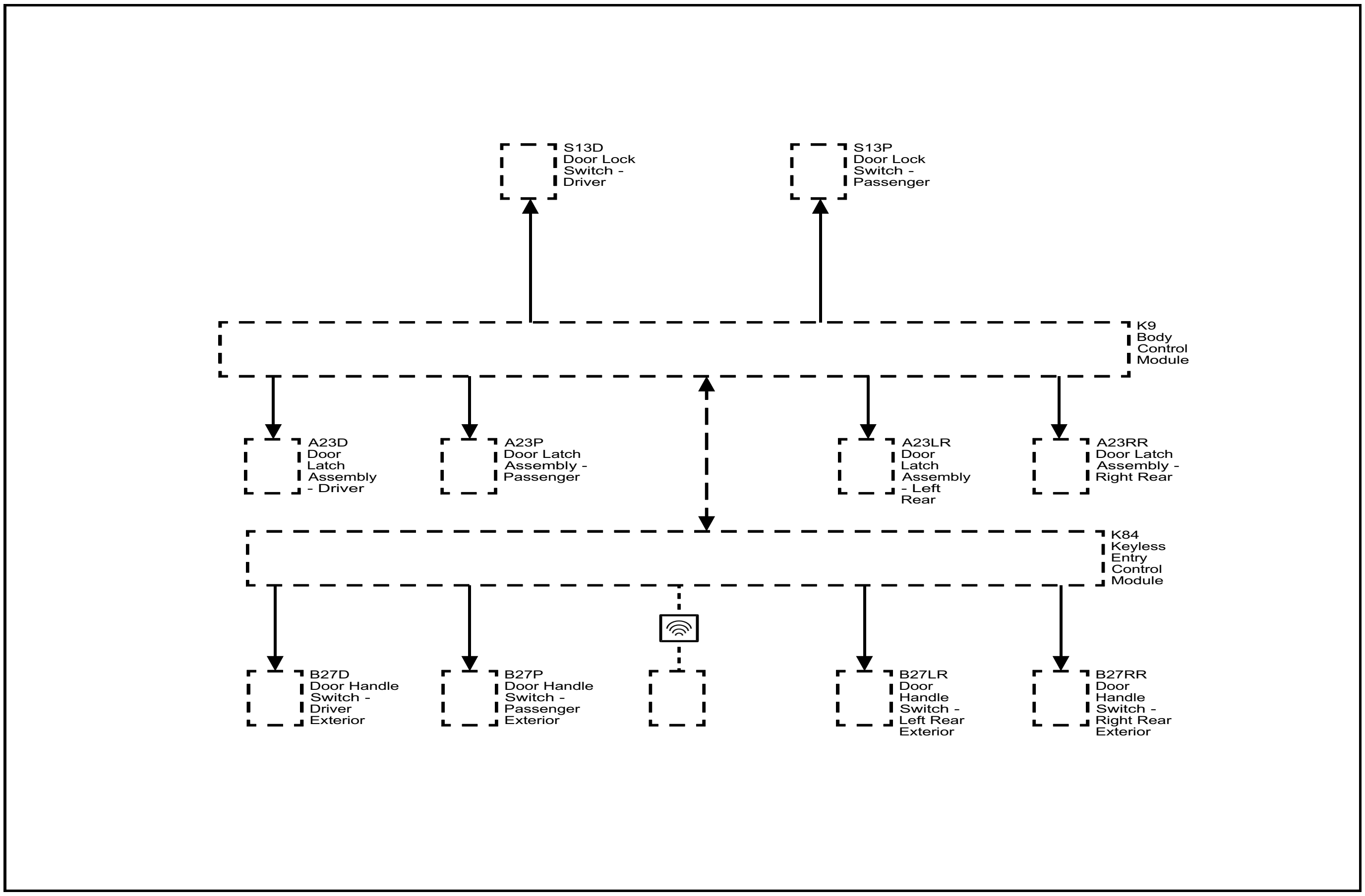
# Power Door Locks Description and Operation

## Door Lock System Components

The power door lock system consists of the following components:

- Driver door lock switch
- Passenger door lock switch
- Key cylinder switch
- Body control module (BCM)
- Driver door latch
- Passenger door latch
- Left rear door latch
- Right rear door latch
- Exterior door handle switches
- Keyless entry control module

## Power Door Locks Block Diagram


S13D Door Lock Switch - Driver
S13P Door Lock Switch - Passenger
K9 Body Control Module
A23D Door Latch Assembly - Driver
A23P Door Latch Assembly - Passenger
A23LR Door Latch Assembly - Left Rear
A23RR Door Latch Assembly - Right Rear
K84 Keyless Entry Control Module
B27D Door Handle Switch - Driver Exterior
B27P Door Handle Switch - Passenger Exterior
B27LR Door Handle Switch - Left Rear Exterior
B27RR Door Handle Switch - Right Rear Exterior

3270435

## Door Lock and Unlock Operation

When the driver or passenger door lock switch is activated in the lock or unlock position, the BCM will receive a ground signal on either the door lock switch lock or unlock signal circuits.

The BCM, upon receipt of a lock switch lock or unlock signal, will supply battery voltage to the door lock actuator lock or unlock control circuits. Since the opposite side of the lock actuator is connected to ground through the other lock actuator control circuit, the doors will then lock or unlock as commanded.

The following three circuits are used to operate the lock:

- Driver door unlock
- Passenger door unlock
- All door lock

The driver door lock actuator is isolated so it can be unlocked by itself using the keyless entry transmitter.

## Key Cylinder Switch

The driver window switch monitors the voltage level of the driver door lock motor status signal circuit. When the key is inserted into the driver door key cylinder and turned to the Lock position, a switch within the driver door latch closes causing the voltage to drop within the driver door lock motor status signal circuit. The driver window switch will detect the drop in voltage and will send a serial data message to the BCM commanding all the doors to Lock.

The driver key cylinder switch is used by the customer for programming the keyless entry transmitters, The driver window/outside rearview mirror switch monitors the voltage level of the key switch unlock signal circuit and when it detects a reprogramming request, it will send a serial data message to the body control module.

## Passive Door Lock/Unlock Operation

The exterior door handle switch signal circuits provide inputs to the keyless entry control module when the exterior door handle switches are activated. These inputs allow the keyless entry control module to detect a door lock or a door unlock request. The keyless entry control module provides a 12 V signal to each exterior door handle switch via the door handle switch signal circuits. When a door handle switch is pressed, the switch closes and the voltage signal within the signal circuit is pulled to ground. The keyless entry control module will detect the voltage drop and a low frequency antenna will transmit a challenge to the keyless entry transmitter. If the challenge is met, the keyless entry transmitter will respond and the keyless entry control module will send a serial data message to the body control module to command the door(s) to be locked or unlocked

## Section 3

# Driver Information and Entertainment

**Image Display Cameras** . . . . . . . . . . . . . . . . . . . . . . . 3-3
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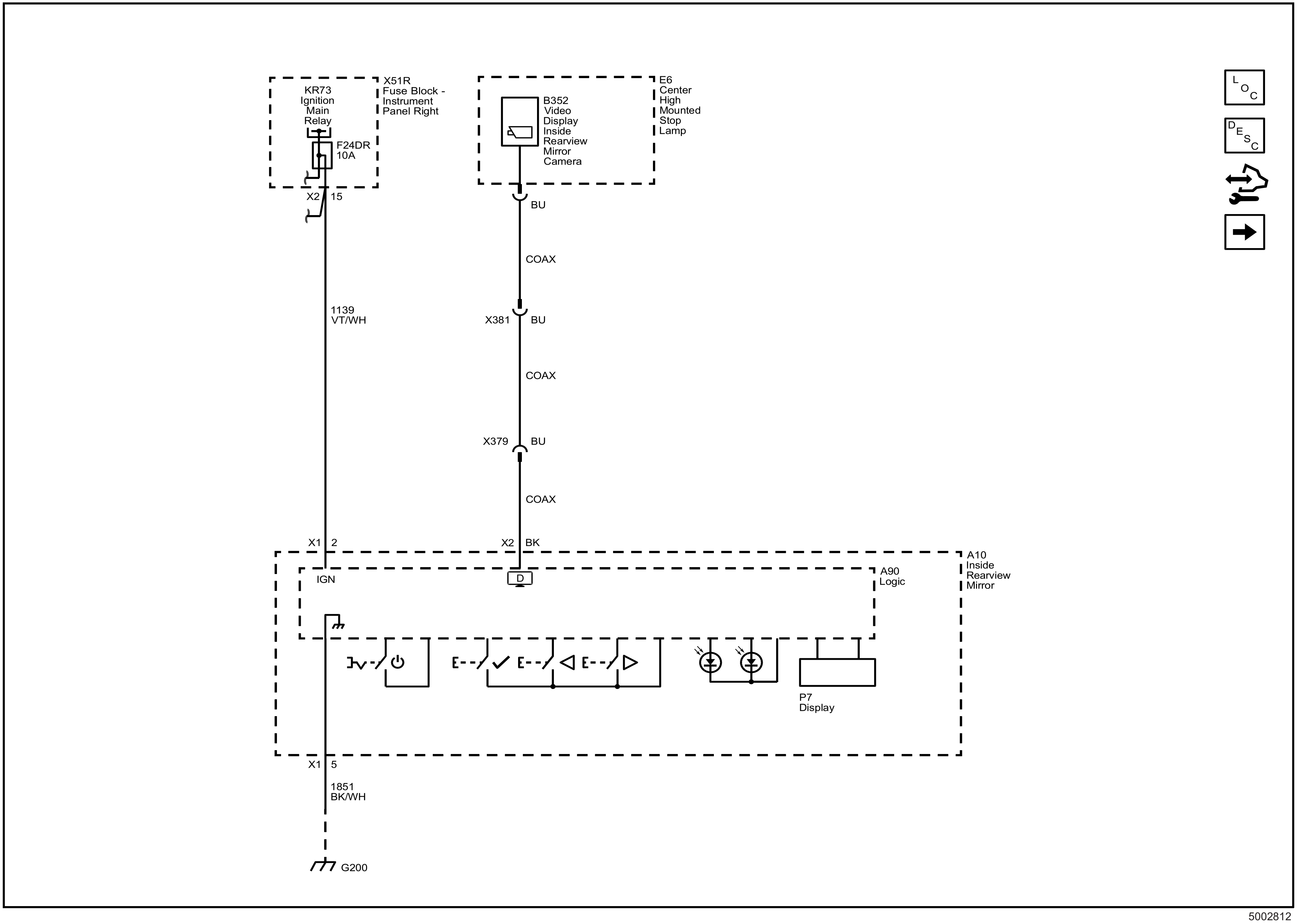
# Image Display Cameras

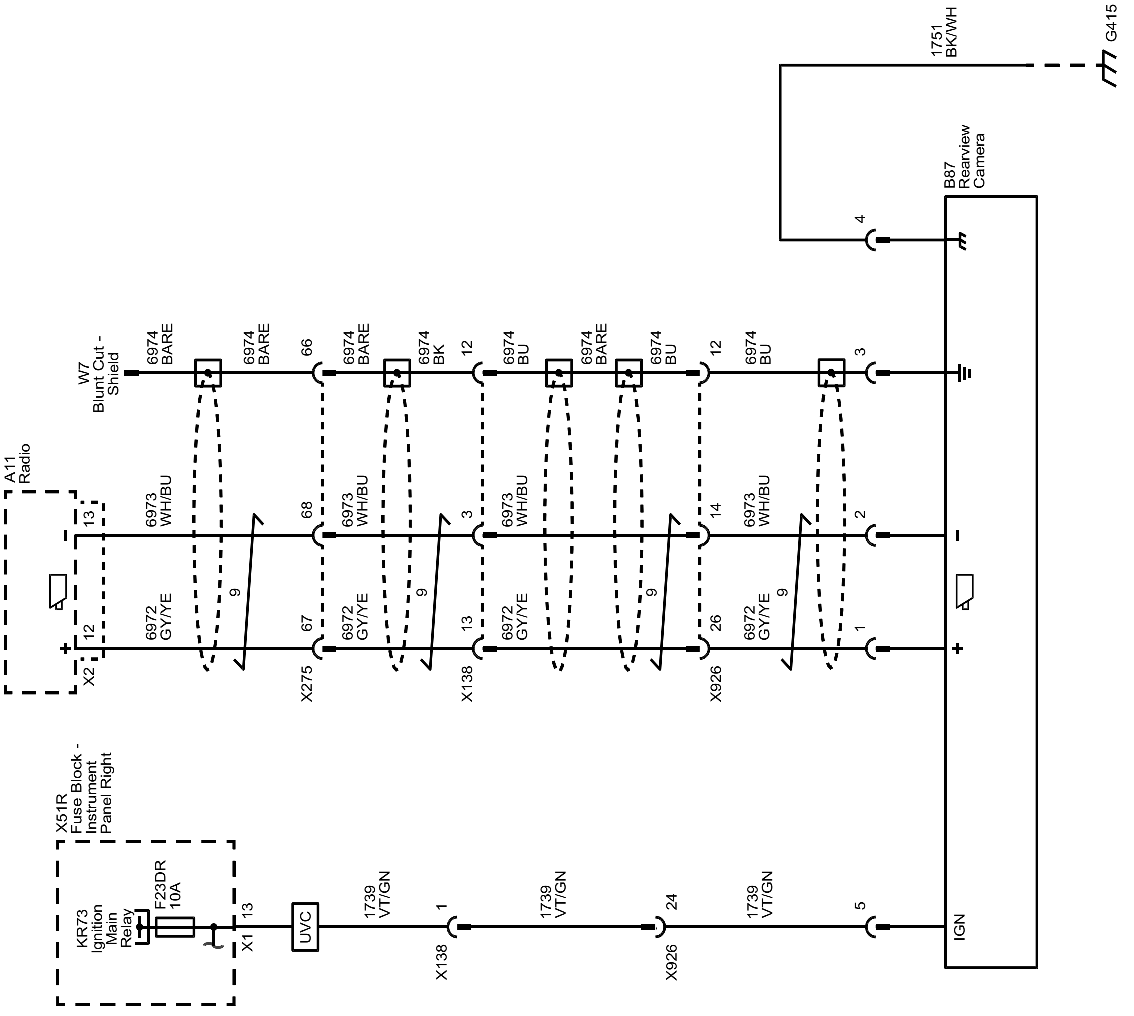
## Schematic and Routing Diagrams

## Image Display Camera Schematics (Rearview Camera (DRZ))

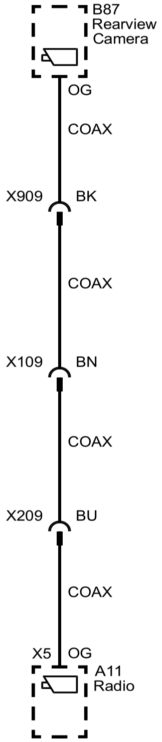

L O C
D E S C
KR73
Ignition
Main
Relay
F24DR
10A
X51R
Fuse Block -
Instrument
Panel Right
X2 15
1139
VT/WH
X1 2
B352
Video
Display
Inside
Rearview
Mirror
Camera
E6
Center
High
Mounted
Stop
Lamp
BU
COAX
X381 BU
COAX
X379 BU
COAX
X2 BK
IGN
D
A90
Logic
A10
Inside
Rearview
Mirror
P7
Display
X1 5
1851
BK/WH
G200
5002812

# Image Display Camera Schematics (Rearview Camera (UVC))

5002813

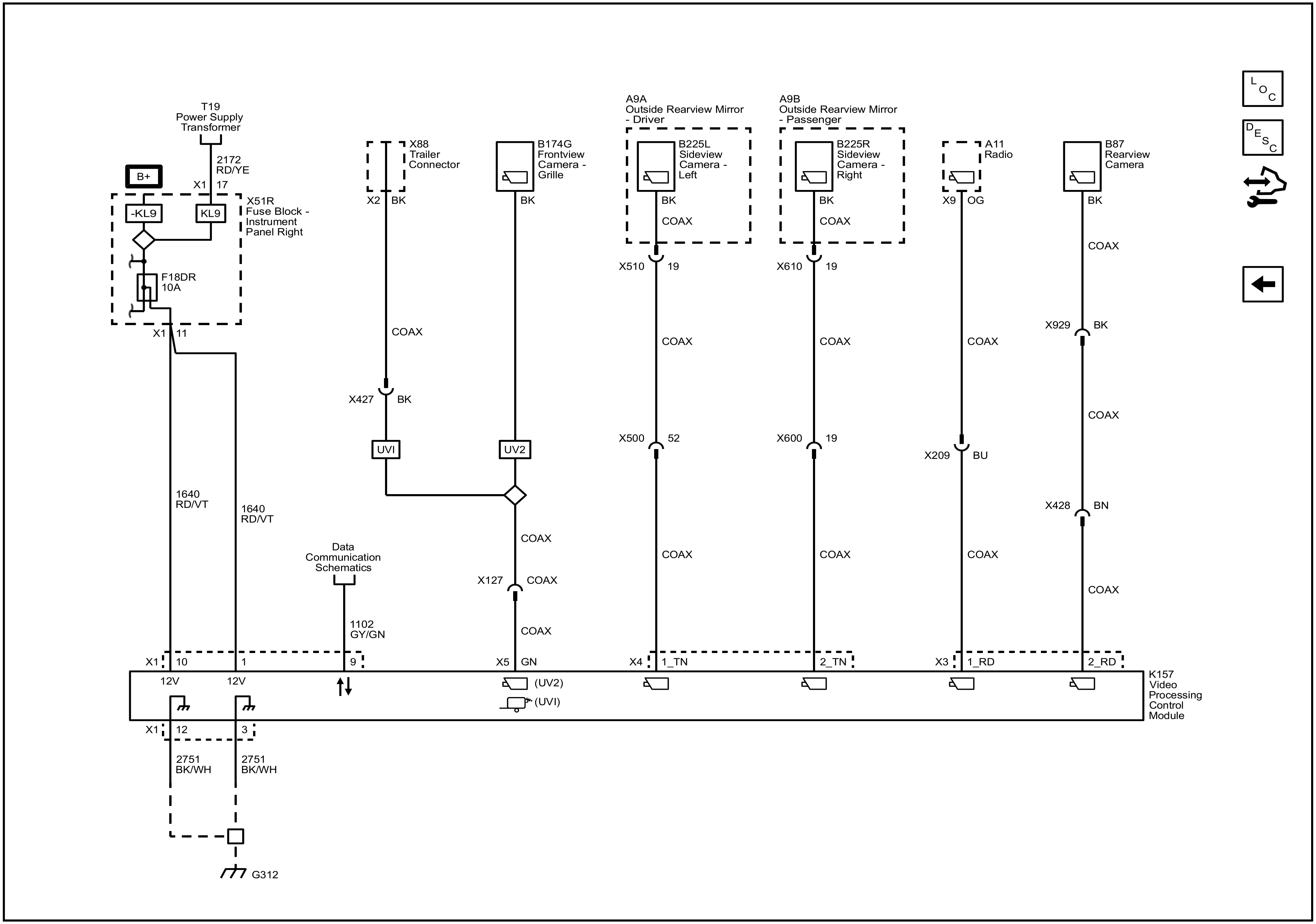

KR73 Ignition Main Relay
F23DR 10A
X51R Fuse Block - Instrument Panel Right
X1 13
UVC
1739 VT/GN
X138 1
1739 VT/GN
X926 24
1739 VT/GN
5
IGN
A11 Radio
X2
12 +
13 -
6972 GY/YE
6973 WH/BU
W7 Blunt Cut - Shield
6974 BARE
9
X275
67
68
66
6972 GY/YE
6973 WH/BU
6974 BARE
6974 BK
9
X138
13
3
12
6972 GY/YE
6973 WH/BU
6974 BU
6974 BARE
6974 BU
9
X926
26
14
12
6972 GY/YE
6973 WH/BU
6974 BU
9
1 +
2 -
3
4
B87 Rearview Camera
1751 BK/WH
G415

## Image Display Camera Schematics (Rearview Camera (UVB))


B87
Rearview
Camera
OG
COAX
X909
BK
COAX
X109
BN
COAX
X209
BU
COAX
X5
OG
A11
Radio

5002814

# Image Display Camera Schematics (270/360 Degree Vision (UVI/UV2))


T19
Power Supply
Transformer
2172
RD/YE
X1 17
B+
-KL9
KL9
X51R
Fuse Block -
Instrument
Panel Right
F18DR
10A
X1 11
1640
RD/VT
1640
RD/VT
X88
Trailer
Connector
X2 BK
COAX
X427 BK
UVI
B174G
Frontview
Camera -
Grille
BK
UV2
COAX
X127 COAX
COAX
A9A
Outside Rearview Mirror
- Driver
B225L
Sideview
Camera -
Left
BK
COAX
X510 19
X500 52
A9B
Outside Rearview Mirror
- Passenger
B225R
Sideview
Camera -
Right
X610 19
X600 19
A11
Radio
X9 OG
X209 BU
B87
Rearview
Camera
X929 BK
X428 BN
Data
Communication
Schematics
1102
GY/GN
X1 10
1
9
X5 GN
X4 1_TN
2_TN
X3 1_RD
2_RD
12V
12V
(UV2)
(UVI)
K157
Video
Processing
Control
Module
X1 12
3
2751
BK/WH
2751
BK/WH
G312
L O C
D E S C
5002815

# Description and Operation

## Rearview Camera Full Display Mirror Description and Operation

If equipped, full display mirror provides a wider field of view than normally seen from the inside rearview mirror to assist when driving and changing lanes. When the tab under the inside rearview mirror is pulled rearward, a view of the area behind the vehicle displays on the mirror. The inside rearview camera full display mirror is connected to the outside rearview camera via a shielded coaxial cable.

When the tab under the inside rearview mirror is pulled rearward, a view of the area behind the vehicle displays on the mirror.

Adjust the rearview mirror for a clear view of the area behind the vehicle before turning on full display mirror. Use the three buttons on the bottom of the mirror to adjust the brightness, zoom, and tilt of the display. Make sure the light sensor is not covered when adjusting the brightness.

The inside rearview camera full display mirror may not work properly or display a clear image if:.

- It is dark.
- The sun or the beam of headlamps are shining directly into the camera lens.
- Ice, snow, mud, or anything else builds up on the camera lens. Clean the lens, rinse it with water, and wipe it with a soft cloth.

When the mirror detects that the camera is not sending a valid video signal, it “blue screens” with a “no video” decal for 3 seconds, then reverts back to the mirror.

## Rear Vision Camera Description and Operation (UVC)

### Rear Vision Camera System Operation

The rear vision camera system consists of a video camera located at the rear of the vehicle and the Rado.

When the transmission is placed into REVERSE, a signal indicates to the Radio that the vehicle is in reverse and image display is requested. The rear vision camera receives ignition voltage and a constant ground to power the camera. Video signal + and video signal – circuits carry the video image from the rear vision camera to the radio. Additionally, the video signal circuits are shielded to prevent any interference which may lead to a loss of video signal resolution and a degraded video image. The shield is provided a ground path by the rear vision camera.

The following conditions may cause a degraded rear vision camera image:

- Ice, snow, or mud has built up on the rear vision camera
- Dark conditions
- Extreme light conditions, such as glare from the sun or the headlights of another vehicle
- Damage to the rear of the vehicle
- Extreme high temperatures or extreme temperature changes

If a malfunction is detected in the system, Service Rear Vision Camera may be displayed on the Info Display Module as an indicator to the customer that a problem exists that requires service.

## Rear Vision Camera Description and Operation (UVB)

### Rear Vision Camera System Operation

The rear vision camera system consists of a video camera located at the rear of the vehicle and the Rado.

When the transmission is placed into REVERSE, a signal is sent to the Radio indicating that camera operation is requested. The rearview camera sends video information to the radio through a coax cable. The coax cable also provides power from the Radio to the rearview camera.

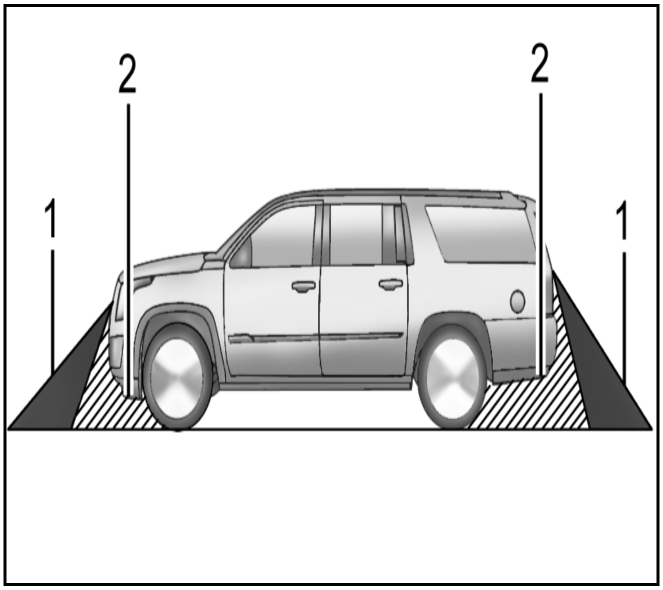
The following conditions may cause a degraded rear vision camera image:

- Ice, snow, or mud has built up on the rear vision camera
- Dark conditions
- Extreme light conditions, such as glare from the sun or the headlights of another vehicle
- Damage to the rear of the vehicle
- Extreme high temperatures or extreme temperature changes

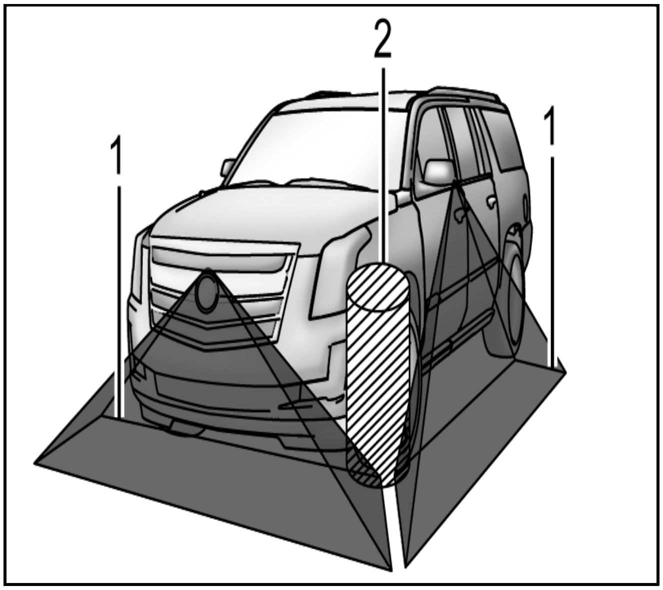
If a malfunction is detected in the system, Service Rear Vision Camera may be displayed on the Info Display Module as an indicator to the customer that a problem exists that requires service.

## Surround Vision Camera Description and Operation (UV2)

***Warning: The Surround Vision cameras have blind spots and will not display all objects near the corners of the vehicle. Folding outside mirrors that are out of position may not display surround view correctly. Always check around the vehicle when parking or backing.***



1. View Displayed by the Surround Vision Camera
2. Area Not Shown



1. View Displayed by the Surround Vision Camera
2. Area Not Shown

The surround vision camera system consists of the following components:

- B87 Rearview Camera
- B174G Frontview Camera – Grille
- K157 Video Processing Control Module
- A11 Radio **OR** K74 Human Machine Interface Module
- B225L Sideview Camera – Left
- B225R Sideview Camera – Right

When the vehicle is traveling at speeds slower than 6 mph (10kph) the video processing control module will power up the cameras and send a video signal to the radio or human machine interface module.

The following conditions may cause a degraded surround vision camera image:

- Ice, snow, or mud has built up on the rear vision camera
- Dark conditions
- Extreme light conditions, such as glare from the sun or the headlights of another vehicle
- Damage to the rear of the vehicle
- Extreme high temperatures or extreme temperature changes

Surround Vision displays an overhead view of the area surrounding the vehicle, along with the front or rear camera views in the center stack. The front camera is in the grille or near the front emblem, the side cameras are on the bottom of the outside rearview mirrors, and the rear vision camera is above the license plate.

**Note:** Images from the Sideview Cameras are only displayed when both front doors are properly closed.

### Features of the Surround Vision System

- Rear camera (B87 Rearview Camera) view alongside overhead view is displayed in reverse
- Front camera (B174G Frontview Camera – Grille) view alongside overhead view is displayed after shifting out of reverse to Neutral or Drive
- Will display front view when front park assist object is within trigger range calibration value (30 cm (12 in) in a forward gear
- Image is removed from display when vehicle speed exceeds speed calibration (10kph/6 mph) or button press / screen touch

### System Operation

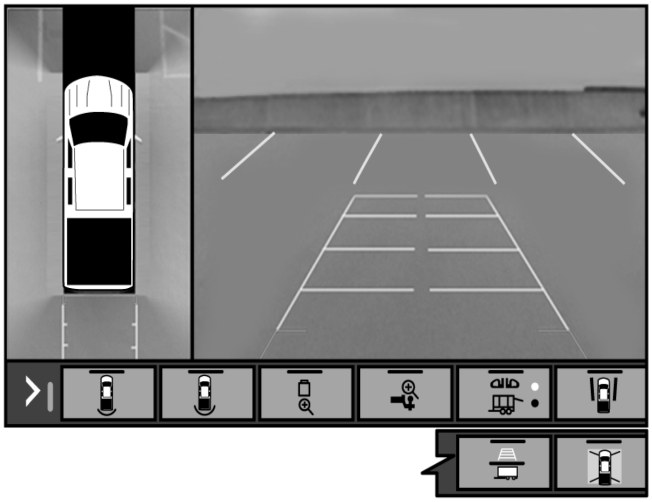
The video processing control module is connected to each camera via a shielded coaxial cable. The coaxial cable provides power for the camera and also carries the video image from the cameras to the video processing control module for processing. The video processing control module will then send the processed image output to infotainment system via another coaxial cable.

The video processing control module receives CAN information from Rear Park Assist object detection module and Steering Wheel angle from body control module during Reverse. A warning triangle may display during the 360 surround view screen if Rear Parking Assist has detected an object during a reverse. This triangle changes from amber to red and increases in size the closer the object. Also a dynamic guideline is displayed in Reverse to show the projected path of the vehicle.

The video processing control module system has a memory card receptacle located in the trunk. The memory card receptacle interfaces with the video processing control module via a USB cable. The memory card receptacle also receives fused battery voltage and ground from the video processing control module. The video processing control module uses the memory card as a mass storage device, similar to a USB storage device.

## Surround Vision Camera Description and Operation (Trailer Vision System (UVI))

***Warning: The Surround Vision cameras have blind spots and will not display all objects near the corners of the vehicle. Folding outside mirrors that are out of position may not display surround view correctly. Always check around the vehicle when parking or backing.***



5147466

The Surround Vision- Trailer Vision camera system consists of the following components:

- B87 Rearview Camera
- Rearview Trailer Camera (if equipped)
- K157 Video Processing Control Module
- A11 Radio
- P17 Info Display Module
- B225L Sideview Camera – Left
- B225R Sideview Camera – Right

When the vehicle is traveling at speeds slower than 6 mph (10kph) the video processing control module will power up the cameras and send a video signal to the radio.

The following conditions may cause a degraded surround vision camera image:

- Ice, snow, or mud has built up on any camera
- Dark conditions
- Extreme light conditions, such as glare from the sun or the headlights of another vehicle
- Body damage to the vehicle
- Extreme high temperatures or extreme temperature changes

Surround Vision displays an overhead view of the area surrounding the vehicle, along with the rear camera views in the center stack. The side cameras are on the bottom of the outside rearview mirrors, and the rear vision camera is above the license plate, and a rearview trailer camera can be mounted on the rear of a trailer.

**Note:** Images from the Sideview Cameras are only displayed when both front doors are properly closed.

### Features of the Surround Vision System

- Rear camera (B87 Rearview Camera) and Rearview Trailer Camera view (if equipped) alongside overhead view is displayed in reverse
- Rearview Trailer Camera (if equipped) view alongside overhead view is displayed after shifting out of reverse to Neutral or Drive
- Image is removed from display when vehicle speed exceeds speed calibration (10kph/6 mph) or button press / screen touch
- Hitch View (when selected) displays a rear view camera image with a single guideline, which aids in aligning the truck to the trailer. If the driver shifts into PARK while in Hitch View, the parking brake is engaged to keep the vehicle from rocking when the driver gets out of the vehicle to hitch the trailer.

### System Operation

The video processing control module is connected to each camera via a shielded coaxial cable. The coaxial cable provides power for the camera and also carries the video image from the cameras to the video processing control module for processing. The video processing control module will then send the processed image output to infotainment system via another coaxial cable.

The video processing control module receives CAN information from Rear Park Assist object detection module and Steering Wheel angle from body control module during Reverse. A warning triangle may display during the surround view screen if Rear Parking Assist has detected an object during a reverse. This triangle changes from amber to red and increases in size the closer the object. Also a dynamic guideline is displayed in Reverse to show the projected path of the vehicle.

# Section 4

# Engine/Propulsion

**12 V Starting and Charging** .................... 4-3
  **Schematic and Routing Diagrams** ............... 4-3
    Starting and Charging Schematics ............... 4-4
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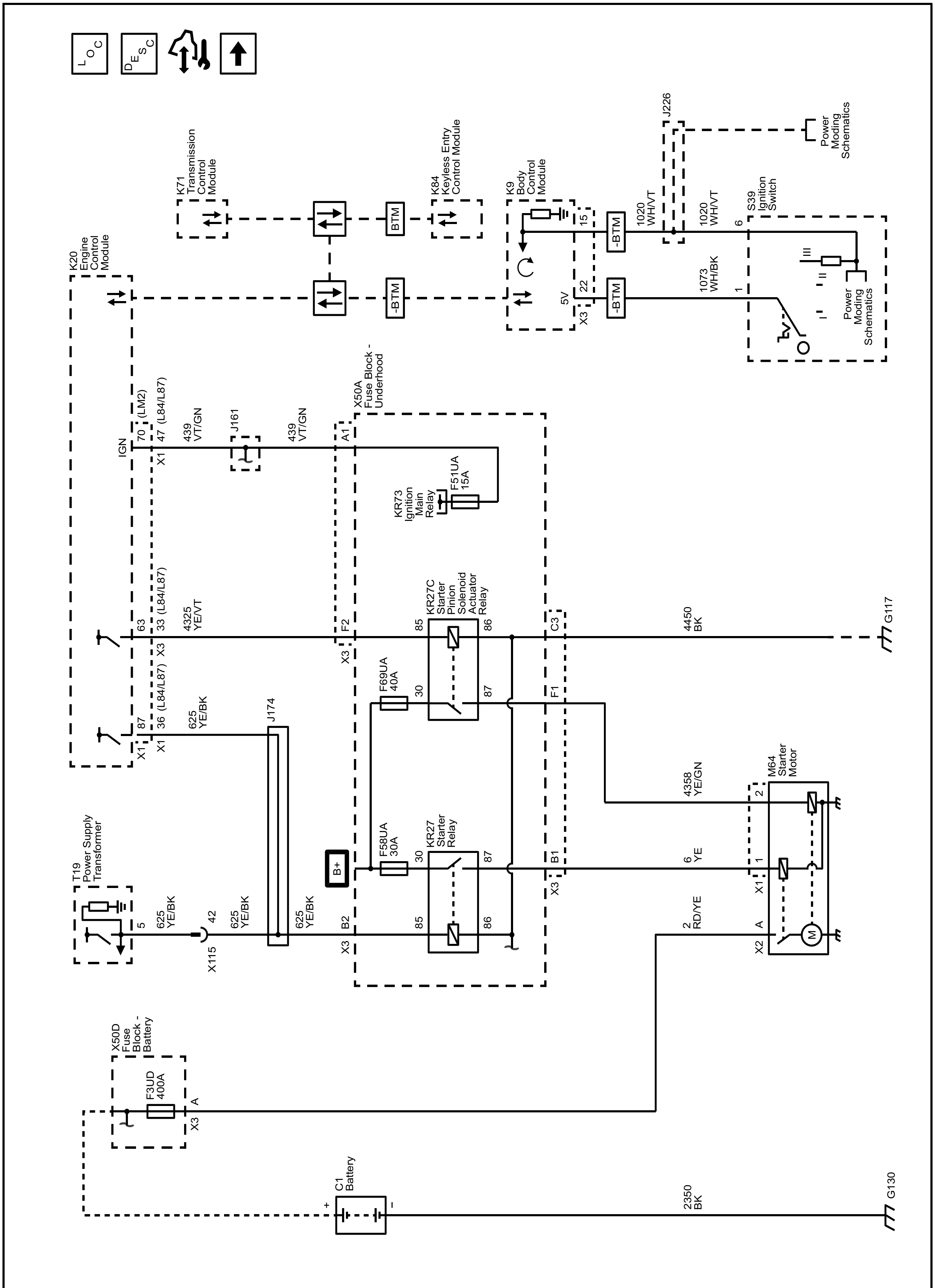
    Electrical Power Management Description and Operation ..................................... 4-14
    Load Shed System Description and Operation ..................................... 4-17
    Starting System Description and Operation .... 4-18
    Stop/Start System Description and Operation (with KL9) .................................... 4-20

BLANK

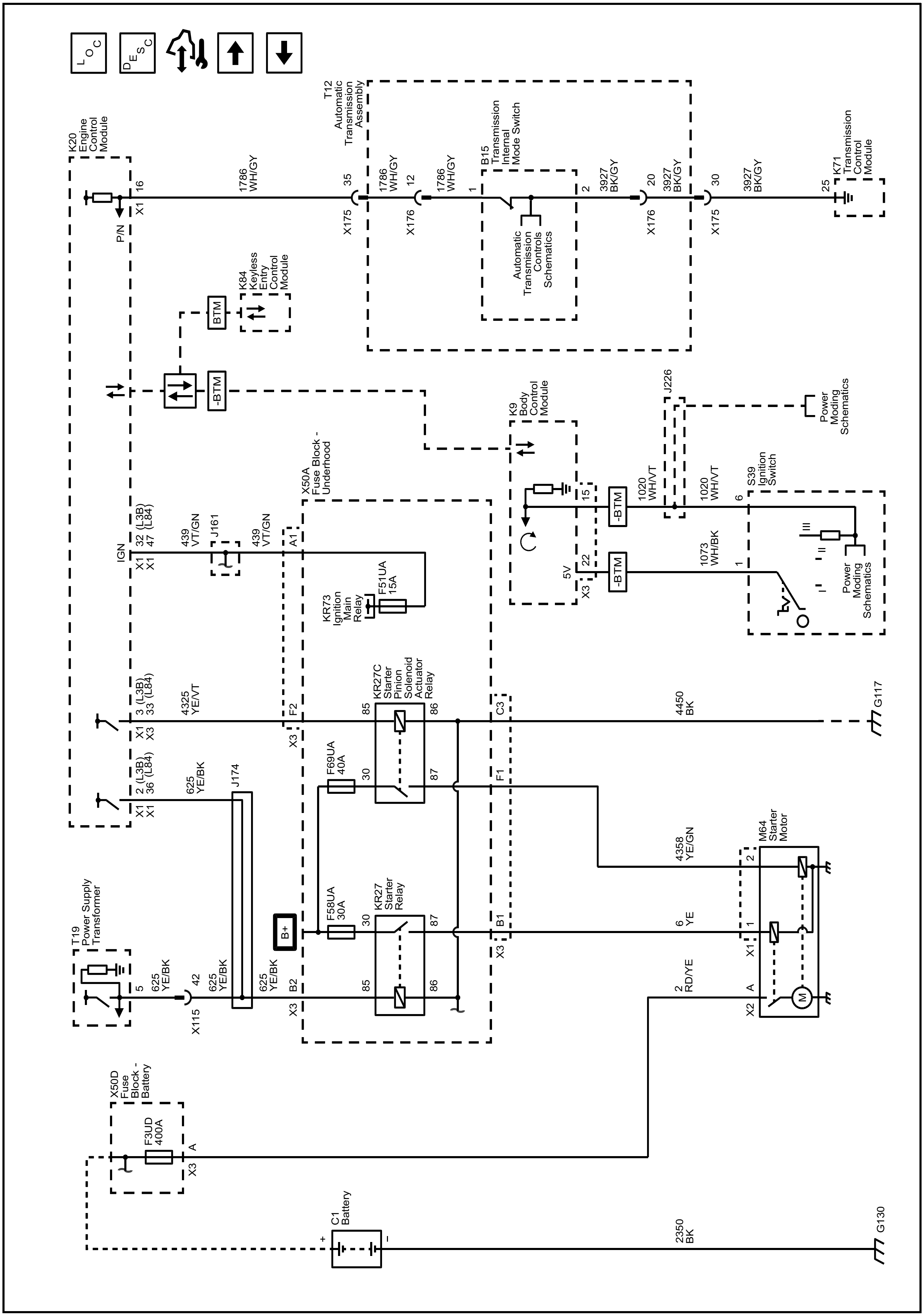
# 12 V Starting and Charging

## Schematic and Routing Diagrams

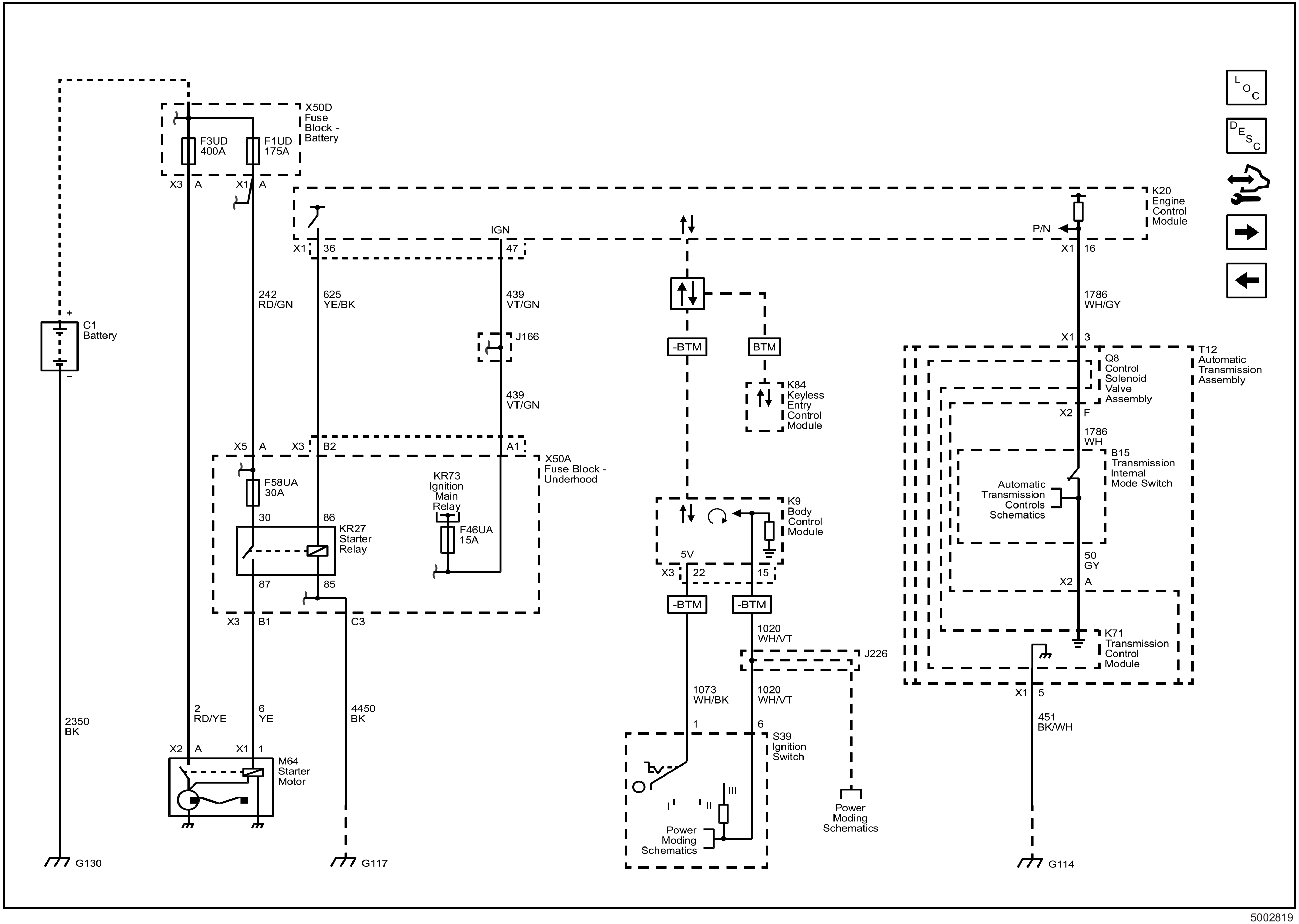
## Starting and Charging Schematics (Starting (MQB))


5002817
LOC
DESC
K20 Engine Control Module
IGN
X1 70 (LM2)
47 (L84/L87)
439 VT/GN
J161
439 VT/GN
A1
X50A Fuse Block - Underhood
KR73 Ignition Main Relay
F51UA 15A
X3 63
33 (L84/L87)
4325 YE/VT
F2
85
KR27C Starter Pinion Solenoid Actuator Relay
86
C3
4450 BK
G117
X1 87
36 (L84/L87)
625 YE/BK
J174
F69UA 40A
30
87
F1
4358 YE/GN
2
M64 Starter Motor
T19 Power Supply Transformer
5
625 YE/BK
42
X115
625 YE/BK
625 YE/BK
B2
X3
B+
F58UA 30A
KR27 Starter Relay
30
87
B1
X3
6 YE
1
X1
85
86
2 RD/YE
A
X2
M
X50D Fuse Block - Battery
F3UD 400A
A
X3
C1 Battery
+
-
2350 BK
G130
K71 Transmission Control Module
BTM
K84 Keyless Entry Control Module
-BTM
K9 Body Control Module
15
22
5V
X3
-BTM
-BTM
1020 WH/VT
J226
1020 WH/VT
6
S39 Ignition Switch
1073 WH/BK
1
III
II
I
Power Moding Schematics
Power Moding Schematics

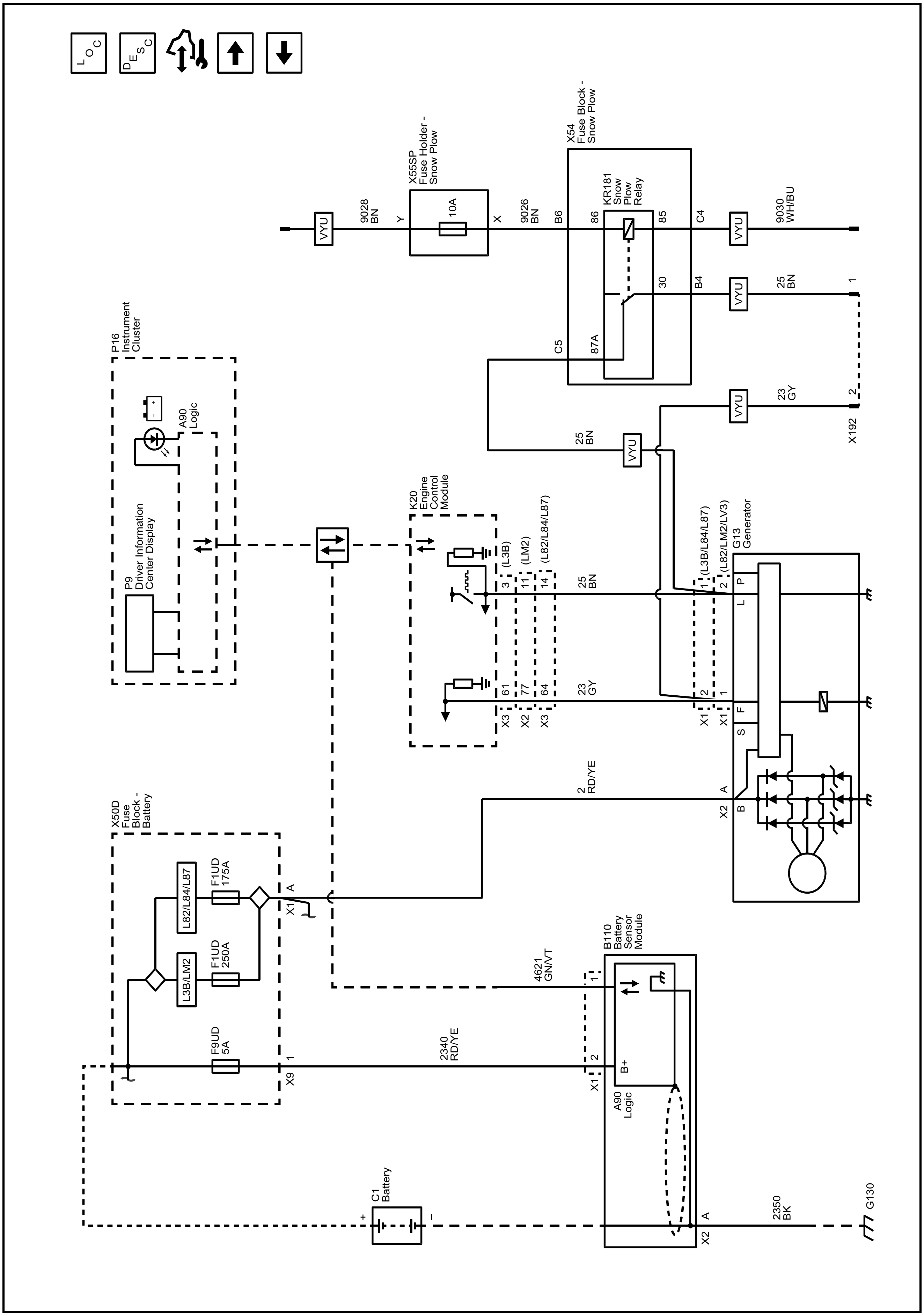
## Starting and Charging Schematics (Starting (MQE))


5002818
LOC
DESC
K20 Engine Control Module
P/N
X1 16
1786 WH/GY
T12 Automatic Transmission Assembly
X175 35
X176 12
B15 Transmission Internal Mode Switch
Automatic Transmission Controls Schematics
3927 BK/GY
X176 20
X175 30
K71 Transmission Control Module
25
K84 Keyless Entry Control Module
BTM
-BTM
K9 Body Control Module
X3 15
X3 22
5V
1020 WH/VT
J226
Power Moding Schematics
S39 Ignition Switch
6
1
1073 WH/BK
III
II
I
IGN
X1 32 (L3B)
X1 47 (L84)
439 VT/GN
J161
X50A Fuse Block - Underhood
A1
KR73 Ignition Main Relay
F51UA 15A
X1 3 (L3B)
X3 33 (L84)
4325 YE/VT
X3 F2
KR27C Starter Pinion Solenoid Actuator Relay
85
86
30
87
C3
4450 BK
G117
X1 2 (L3B)
X1 36 (L84)
625 YE/BK
J174
F69UA 40A
F1
4358 YE/GN
M64 Starter Motor
2
T19 Power Supply Transformer
5
X115 42
X3 B2
B+
F58UA 30A
KR27 Starter Relay
B1
6 YE
X1 1
2 RD/YE
X2 A
M
X50D Fuse Block - Battery
F3UD 400A
X3 A
C1 Battery
+
-
2350 BK
G130

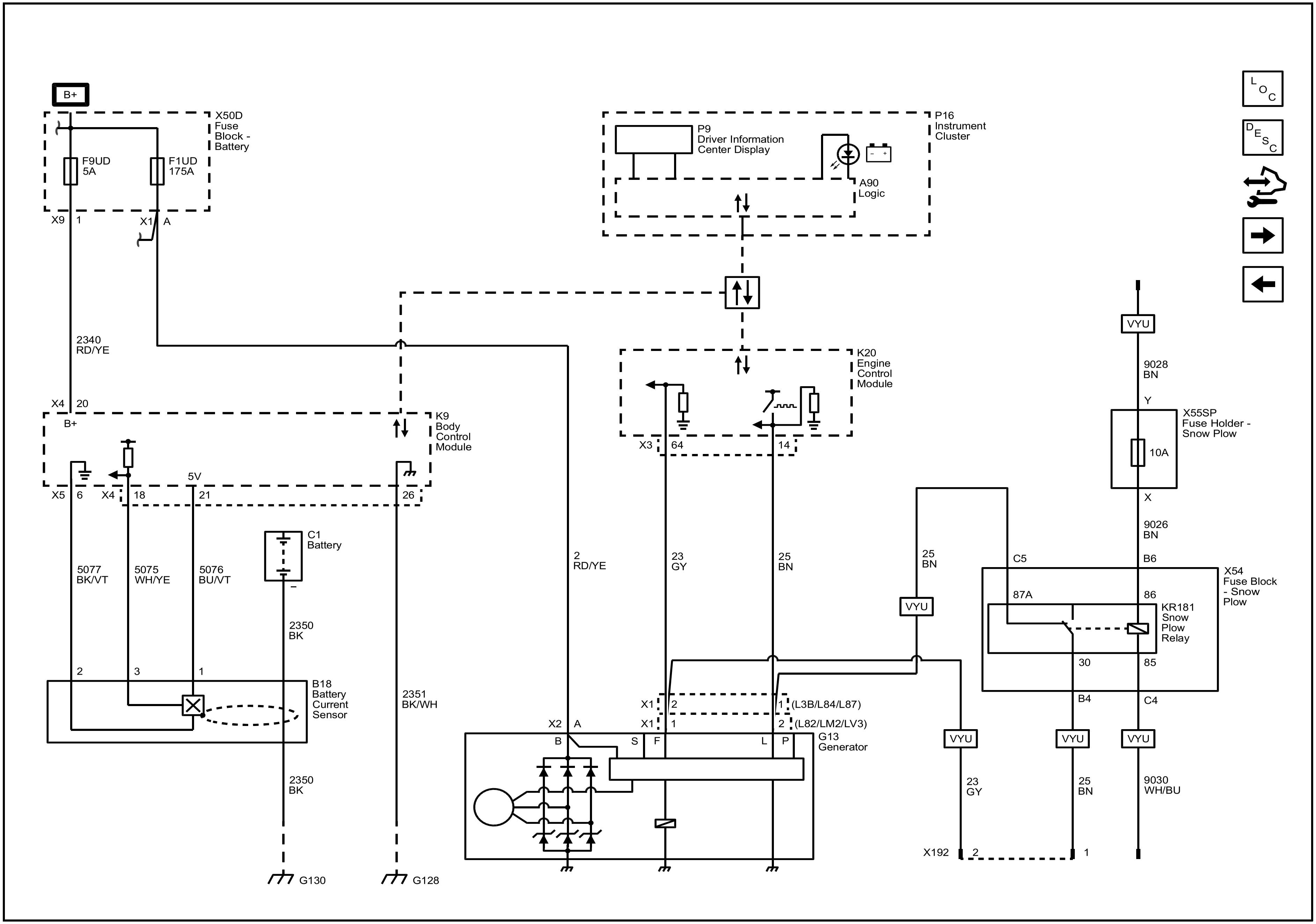
## Starting and Charging Schematics (Starting (MYC))


X50D
Fuse
Block -
Battery
F3UD
400A
F1UD
175A
X3 A
X1 A
C1
Battery
+
−
2350
BK
G130
K20
Engine
Control
Module
X1 36
IGN
47
P/N
X1 16
242
RD/GN
625
YE/BK
439
VT/GN
J166
439
VT/GN
X5 A
X3 B2
A1
X50A
Fuse Block -
Underhood
F58UA
30A
30
86
KR27
Starter
Relay
87
85
KR73
Ignition
Main
Relay
F46UA
15A
X3 B1
C3
2
RD/YE
6
YE
4450
BK
X2 A
X1 1
M64
Starter
Motor
G117
-BTM
BTM
K84
Keyless
Entry
Control
Module
K9
Body
Control
Module
5V
X3 22
15
-BTM
-BTM
1020
WH/VT
J226
1073
WH/BK
1020
WH/VT
1
6
S39
Ignition
Switch
III
I
II
Power
Moding
Schematics
Power
Moding
Schematics
1786
WH/GY
X1 3
T12
Automatic
Transmission
Assembly
Q8
Control
Solenoid
Valve
Assembly
X2 F
1786
WH
B15
Transmission
Internal
Mode Switch
Automatic
Transmission
Controls
Schematics
50
GY
X2 A
K71
Transmission
Control
Module
X1 5
451
BK/WH
G114
LOC
DESC
5002819

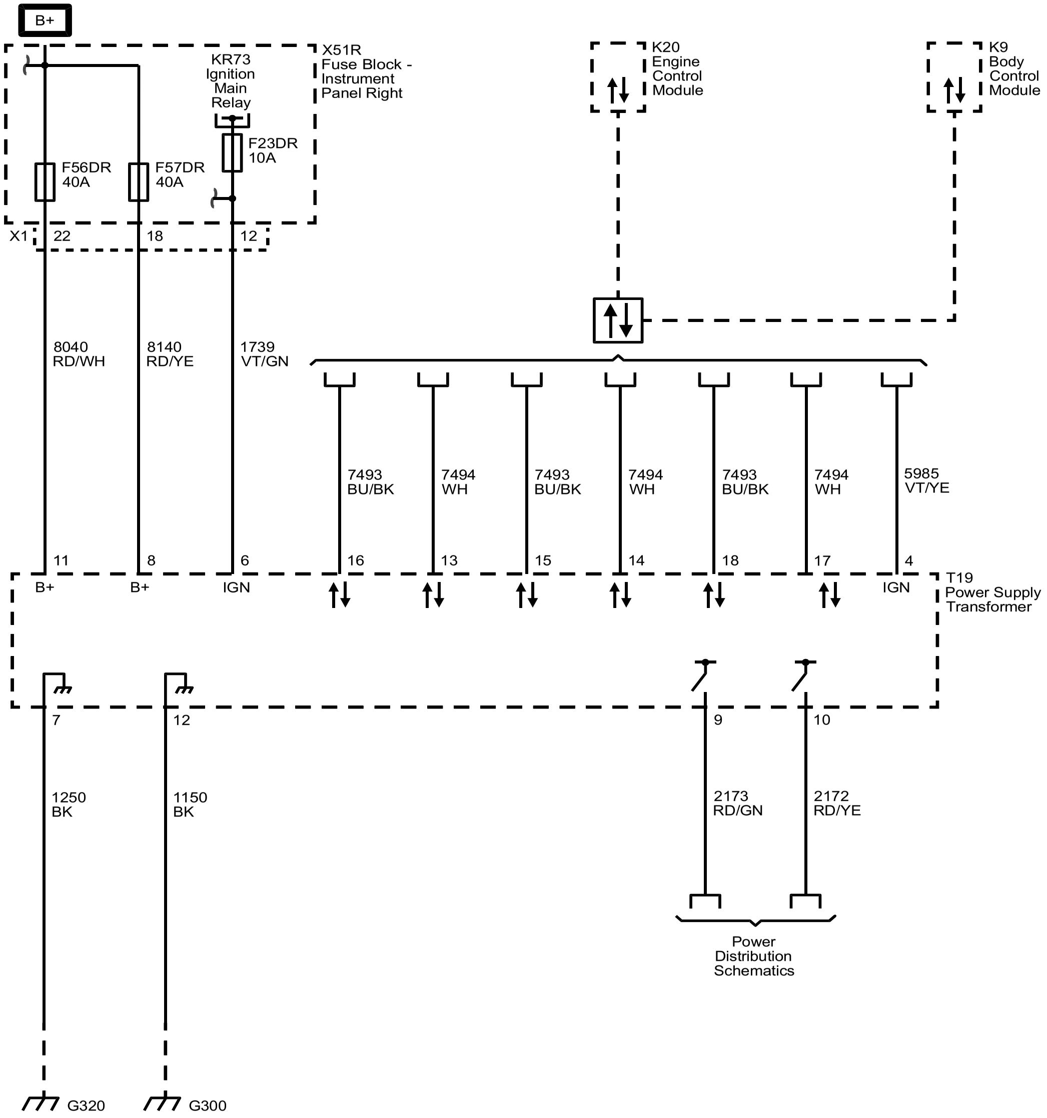
## Starting and Charging Schematics (Charging (KL9))


5002821
LOC
DESC
P16 Instrument Cluster
A90 Logic
P9 Driver Information Center Display
K20 Engine Control Module
(L3B)
(LM2)
(L82/L84/L87)
X3 3
X2 11
X3 14
X3 61
X2 77
X3 64
25 BN
23 GY
X50D Fuse Block - Battery
L82/L84/L87
F1UD 175A
L3B/LM2
F1UD 250A
F9UD 5A
X1 A
X9 1
2 RD/YE
2340 RD/YE
4621 GN/VT
B110 Battery Sensor Module
X1 1
X1 2
B+
A90 Logic
C1 Battery
+
–
X2 A
2350 BK
G130
X55SP Fuse Holder - Snow Plow
10A
Y
X
VYU
9028 BN
9026 BN
X54 Fuse Block - Snow Plow
KR181 Snow Plow Relay
B6
86
85
C4
30
B4
C5
87A
9030 WH/BU
25 BN
23 GY
1
2
X192
(L3B/L84/L87)
(L82/LM2/LV3)
G13 Generator
X1 1
X1 2
X1 2
X1 1
P
L
F
S
X2 A
X2 B

## Starting and Charging Schematics (Charging (-KL9))


B+
X50D
Fuse
Block -
Battery
F9UD
5A
F1UD
175A
X9 1
X1 A
2340
RD/YE
X4 20
B+
K9
Body
Control
Module
X5 6
X4 18
5V
21
26
5077
BK/VT
5075
WH/YE
5076
BU/VT
C1
Battery
2350
BK
2
3
1
B18
Battery
Current
Sensor
2350
BK
G130
2351
BK/WH
G128
P9
Driver Information
Center Display
P16
Instrument
Cluster
A90
Logic
K20
Engine
Control
Module
X3 64
14
2
RD/YE
23
GY
25
BN
X2 A
B
X1 2
X1 1
1 (L3B/L84/L87)
2 (L82/LM2/LV3)
S
F
L
P
G13
Generator
25
BN
VYU
VYU
23
GY
VYU
25
BN
VYU
9030
WH/BU
X192 2
1
C5
87A
30
B4
B6
86
85
C4
X54
Fuse Block
- Snow
Plow
KR181
Snow
Plow
Relay
9026
BN
X
X55SP
Fuse Holder -
Snow Plow
10A
Y
9028
BN
VYU
L O C
D E S C
5002820

# Starting and Charging Schematics (Power Supply Transformer Power, Ground, Serial Data, and Subsystem References (KL9))


B+
X51R
Fuse Block -
Instrument
Panel Right
KR73
Ignition
Main
Relay
F56DR
40A
F57DR
40A
F23DR
10A
X1
22
18
12
8040
RD/WH
8140
RD/YE
1739
VT/GN
K20
Engine
Control
Module
K9
Body
Control
Module
7493
BU/BK
7494
WH
7493
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7494
WH
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BU/BK
7494
WH
5985
VT/YE
11
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6
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18
17
4
B+
B+
IGN
IGN
T19
Power Supply
Transformer
7
12
9
10
1250
BK
1150
BK
2173
RD/GN
2172
RD/YE
Power
Distribution
Schematics
G320
G300

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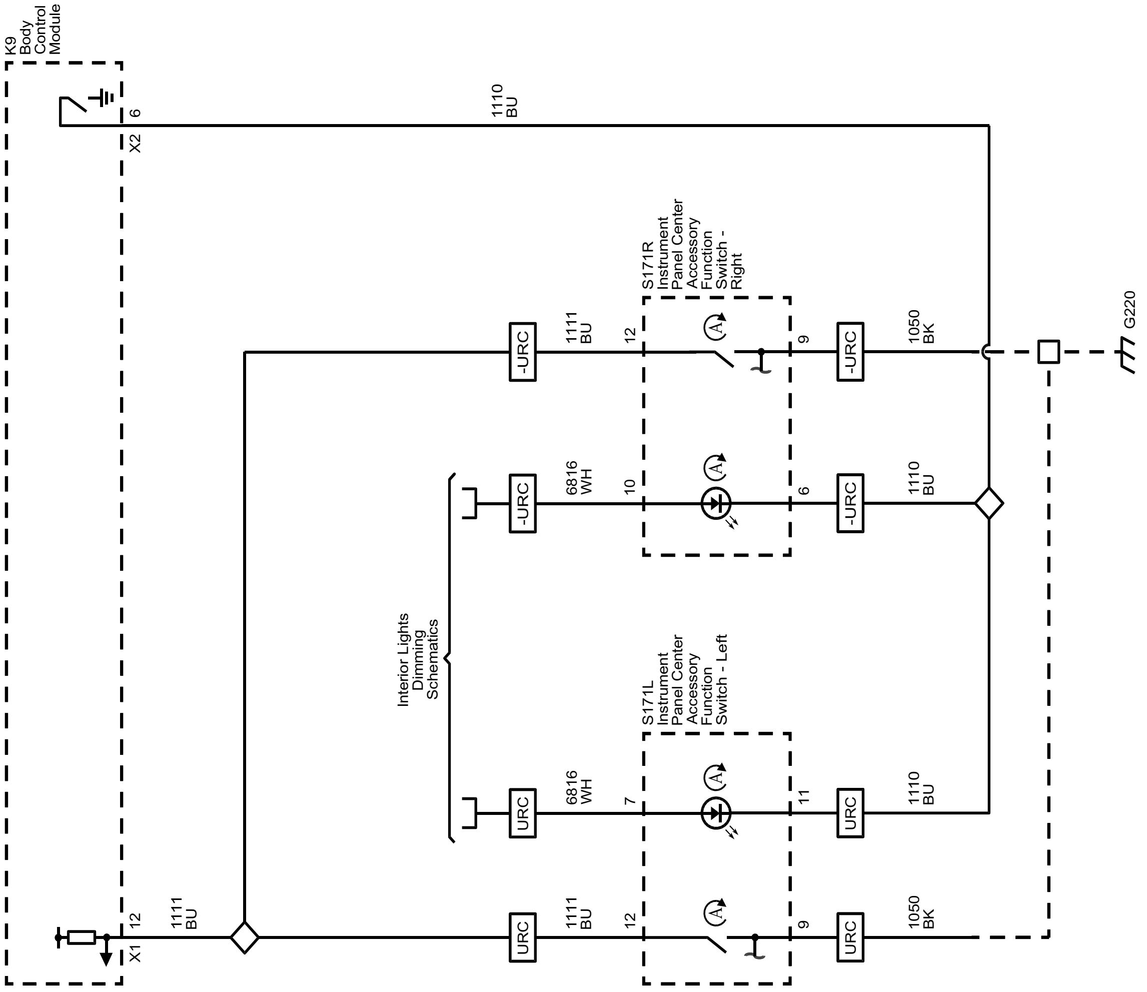
## Starting and Charging Schematics (Stop/Start Controls (KL9))


5067748
K9 Body Control Module
X2 6
1110 BU
X1 12
1111 BU
S171R Instrument Panel Center Accessory Function Switch - Right
S171L Instrument Panel Center Accessory Function Switch - Left
-URC
URC
1111 BU
12
6816 WH
10
7
9
6
11
1050 BK
1110 BU
G220
Interior Lights Dimming Schematics

# Description and Operation

## Charging System Description and Operation

### Electrical Power Management Overview

The electrical power management system is designed to monitor and control the charging system and send diagnostic messages to alert the driver of possible problems with the battery and generator. This electrical power management system primarily utilizes existing on-board computer capability to maximize the effectiveness of the generator, to manage the load, improve battery state-of-charge and life, and minimize the system's impact on fuel economy. The electrical power management system performs 3 functions:

- Monitor the battery voltage and estimate the battery condition
- Take corrective actions by boosting idle speeds, and adjusting the regulated voltage
- Perform diagnostics and driver notification

The battery condition is estimated during ignition/vehicle off and during ignition/vehicle on. During ignition/vehicle off the state-of-charge of the battery is determined by measuring the open-circuit voltage. The state-of-charge is a function of the acid concentration and the internal resistance of the battery, and is estimated by reading the battery open circuit voltage when the battery has been at rest for several hours.

Any time the ignition/vehicle is on, the vehicle algorithm continuously estimates battery state-of-charge based on adjusted net amp hours, battery capacity, initial state-of-charge, and calculated temperature.

While the engine is running, the battery degree of discharge is primarily determined by the integrated battery current sensor, to obtain net amp hours.

In addition, the electrical power management function is designed to perform regulated voltage control to improve battery state-of-charge, battery life, and fuel economy. This is accomplished by using knowledge of the battery state-of-charge and temperature to set the charging voltage to an optimum battery voltage level for recharging without detriment to battery life.

### Charging System Components

**Generator**

The engine drive belt drives the generator. When the rotor is spun, it induces an alternating current (AC) into the stator windings. The AC voltage is then sent through a series of diodes for rectification. The rectified voltage has been converted into a direct current (DC) for use by the vehicles electrical system to maintain electrical loads and the battery charge. The voltage regulator integral to the generator controls the output of the generator; It is not serviceable. The voltage regulator controls the amount of current provided to the rotor. If the generator has field control circuit fault, the generator defaults to an output voltage of 13.8 V.

The generator is serviced as a complete assembly. If there is a diagnosed fault in the generator, it must be replaced as an assembly.

**Generator Pulley**

The pulley drives the Generator via the engine drive belt. There are 2 types of pulleys:

1. Conventional solid Pulley which is bolted to the Generator stator shaft. This Pulley can be serviced separately.

2. One Way Clutch Pulley or Overrunning Alternator Decoupler Pulley allows the Generator to spin freely when the engine rapidly slows down on sudden deceleration. This part is not serviceable and the Generator needs to be replaced as an assembly.

**Body Control Module (BCM)**

The BCM communicates with the Engine Control Module (ECM) and the instrument cluster for electrical power management operation. The BCM determines the output of the generator and sends the information to the ECM for control of the generator turn on signal circuit. It monitors the generator field duty cycle signal circuit information sent from the ECM for control of the generator. It monitors the battery current sensor, the battery positive voltage circuit, and estimates battery temperature to determine battery state of charge. The BCM also performs idle boost.

**Battery Current Sensor (if applicable)**

The Battery Current Sensor is a serviceable component that is connected to the negative battery cable at the battery. The battery current sensor is a 3-wire hall effect current sensor. The battery current sensor monitors the battery current. It directly inputs to the BCM. It creates a 5 volt Pulse Width Modulation (PWM) signal of 128 Hz with a duty cycle of 0–100%. Normal duty cycle is between 5–95%. Between 0–5% and 95–100% are for diagnostic purposes.

**Battery Sensor Module (if applicable)**

The BCM monitors the Battery Sensor Module for battery state of current, state of health, and battery charge via serial data. If the battery is determined to be in poor state of health or having a low state of charge, the BCM will not allow the ECM to perform an auto-stop.

**Engine Control Module (ECM)**

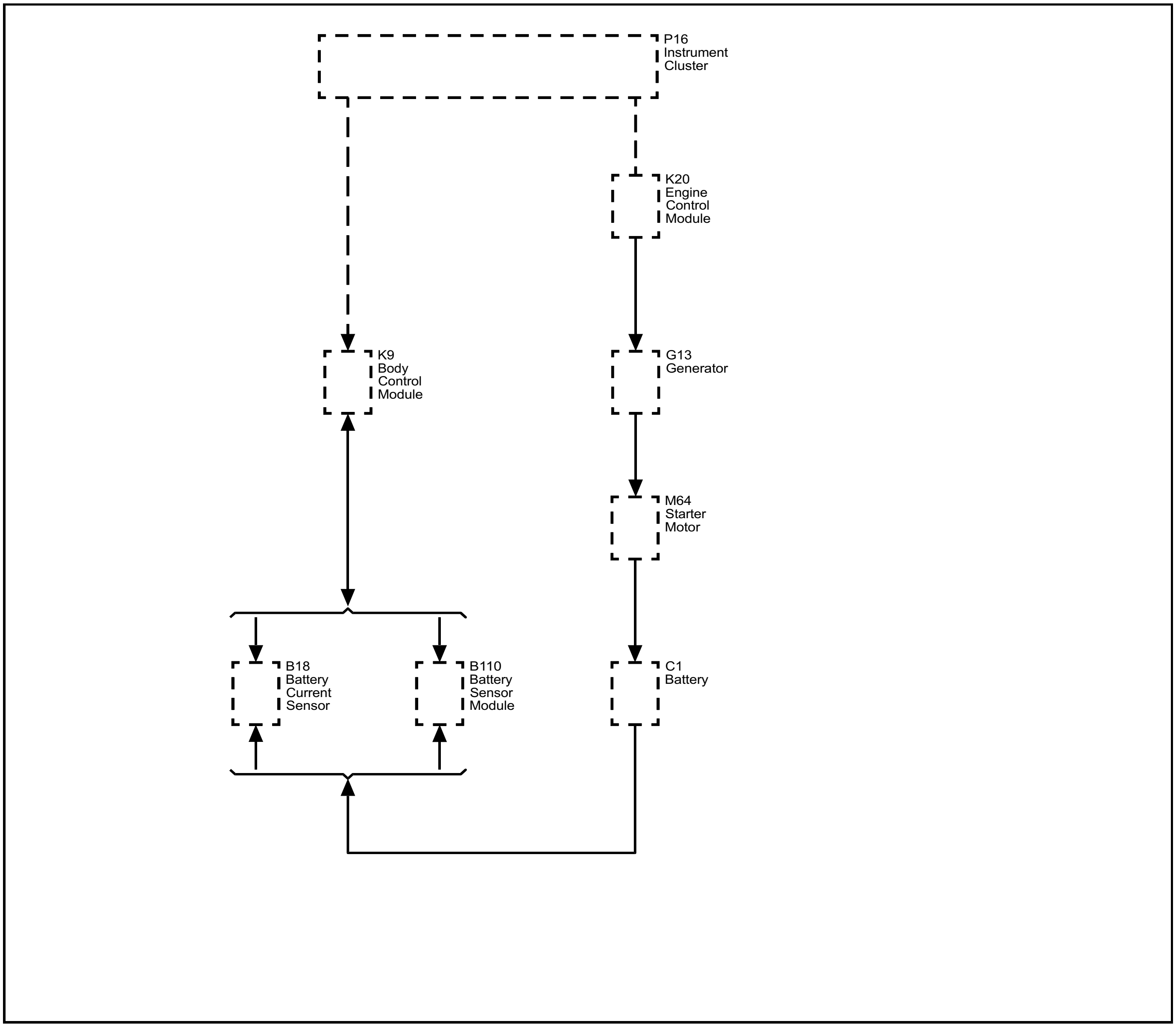
When the engine is running, the generator turn-on signal is sent to the generator from the ECM, turning on the regulator. The generator's voltage regulator controls current to the rotor, thereby controlling the output voltage. The rotor current is proportional to the electrical pulse width supplied by the regulator. When the engine is started, the regulator senses generator rotation by detecting AC voltage at the stator through an internal wire. Once the engine is running, the regulator varies the field current by controlling the pulse width. This regulates the generator output voltage for proper battery charging and electrical system operation. The generator field duty terminal is connected internally to the voltage regulator and externally to the ECM. When the voltage regulator detects a charging system problem, it grounds this circuit to signal the ECM that a problem exists. The ECM monitors the generator field duty cycle signal circuit, and receives control decisions based on information from the BCM.

**Instrument Cluster**

As a means of displaying the charging system functions, some vehicles may be equipped with a voltmeter gauge on the instrument cluster and/or a system voltage display in the driver information center. These will indicate the current vehicle system voltage.

The instrument cluster also provides customer notification if there is a concern with the charging system. There are two means of notification: a charge indicator on the instrument cluster and/or a service system message displayed on the Driver Information Center (DIC) if equipped.

### Charging System Block Diagram


P16 Instrument Cluster
K20 Engine Control Module
K9 Body Control Module
G13 Generator
M64 Starter Motor
B18 Battery Current Sensor
B110 Battery Sensor Module
C1 Battery
3603724

## Charging System Operation

The purpose of the charging system is to maintain the battery charge and vehicle loads. There are 6 modes of operation and they include:

- Battery Sulfation Mode
- Charge Mode
- Fuel Economy Mode
- Head lamp Mode
- Start Up Mode
- Voltage Reduction Mode

The ECM Controls the Generator through the generator turn–on signal circuit, also known as the Generator L-terminal. The ECM monitors the generator performance though the Generator field duty cycle signal circuit, also known as the generator F-terminal.

The Generator turn–on signal (Generator L-terminal) is a Pulse Width Modulation (PWM) signal of 128 Hz with a duty cycle of 0–100%. Normal duty cycle is between 5–95%. 0–5% and 95–100% are for diagnostic purposes, with 0–5% monitoring for an open circuit and 95–100% monitoring for a short to ground at a fixed 13.8 V. The following table shows the commanded duty cycle and output voltage of the Generator:

| Commanded Duty Cycle | Generator Output Voltage (+/- .25 V) |
|---|---|
| 0–5% | 13.8 V |
| 10% | 11 V |
| 20% | 11.56 V |
| 30% | 12.13 V |
| 40% | 12.69 V |
| 50% | 13.25 V |
| 60% | 13.81 V |
| 70% | 14.38 V |
| 80% | 14.94 V |
| 90% | 15.5 V |
| 95–100% | 13.8 V |

The Generator provides a PWM feedback signal of the Generator voltage output through the Generator field duty cycle signal circuit to the ECM. This information is sent to the Body Control Module (BCM). The Generator field duty cycle signal (Generator F-terminal) is a PWM signal of 60–460 Hz with a duty cycle of 0–100%. Normal duty cycle is between 5–100%. 0–5% is reserved for diagnostic purposes.

As the charging systems works to maintain the battery charge and manage vehicle electrical loads, it is normal for the voltmeter gauge on the instrument cluster or the system voltage displayed in the DIC to fluctuate or change. This does not indicate a malfunction. Depending on the battery state of charge and the vehicle electrical load, these values may be anywhere from 12.5 V to 15.5 V.

## Charging System Modes

### Battery Sulfation Mode

The BCM will enter this mode when the interpreted Generator output voltage is less than 13.2 V for 45 minutes. When this condition exists the BCM will enter Charge Mode for 2–3 minutes. The BCM will then determine which mode to enter depending on voltage requirements.

### Charge Mode

The BCM will enter Charge Mode when ever one of the following conditions are met:

- Windshield wipers are ON for more than 3 s.
- Climate Control Voltage Boost Mode Request is true, as sensed by the HVAC control module via serial data. High speed cooling fan, rear defogger, and HVAC high speed blower operation can cause the BCM to enter the Charge Mode.
- The estimated battery temperature is less than 0° C (32°F).
- Battery State of Charge is less than 80%.
- Vehicle speed is greater than 145 km/h (90 mph)
- A current sensor malfunction exists.
- System voltage is determined to be below 12.56 V

When any one of these conditions is met, the system will set targeted generator output voltage to a charging voltage between 13.9–15.5 V, depending on the battery state of charge and estimated battery temperature.

### Fuel Economy Mode

The BCM will enter Fuel Economy Mode when the estimated battery temperature is at least 0°C (32°F) but less than or equal to 80°C (176°F), the calculated battery current is less than 15 A and greater than −8 A, and the battery state-of-charge is greater than or equal to 80%. Its targeted generator output voltage is the open circuit voltage of the battery and can be between 12.5–13.1 V. When fuel economy mode is active, the generator is not charging, only maintaining open circuit battery voltage. The BCM will exit this mode and enter Charge Mode when any of the conditions described above are present.

### Headlamp Mode

The BCM will enter Headlamp Mode when ever the head lamps are ON (high or low beams). Voltage will be regulated between 13.9–14.5 V.

### Start Up Mode

When the engine is started the BCM sets a targeted generator output voltage of 14.5 V for 30 s.

### Tow/Haul Mode (if applicable)

Pressing the Tow/Haul Mode button located on the center stack, the vehicle system voltage is raised and the remote (non-vehicle) battery will be charged. Having the headlamps on will raise the system voltage and if the Tow/Haul button is applied it will not serve any purpose. The voltage is regulated between 13.9-14.5 V.

## Instrument Cluster Operation

### Charge Indicator Operation

The instrument cluster illuminates the charge indicator and displays a warning message in the driver information center if equipped, when the one or more of the following occurs:

- The ECM detects that the generator output is less than 11 V or greater than 16 V. The instrument cluster receives a serial data message from the ECM requesting illumination.
- The instrument cluster determines that the system voltage is less than 11 V or greater than 16 V for more than 30 s. The instrument cluster receives a serial data message from the BCM indicating there is a system voltage range concern.
- The instrument cluster performs the displays test at the start of each ignition cycle. The indicator illuminates for approximately 3 s.

### Driver Information Center Message: BATTERY NOT CHARGING SERVICE CHARGING SYSTEM or SERVICE BATTERY CHARGING SYSTEM

The BCM and the ECM will send a serial data message to the driver information center for the BATTERY NOT CHARGING SERVICE CHARGING SYSTEM or SERVICE BATTERY CHARGING SYSTEM message to be displayed. It is displayed when a charging system DTC is a current DTC. The message is turned off when the conditions for clearing the DTC have been met.

**Voltmeter Gauge and/or System Voltage Display (if equipped)**

As a means of displaying the charging system functions, some vehicles may be equipped with a voltmeter gauge on the instrument cluster and/or a system voltage display in the driver information center. These will indicate the current vehicle system voltage.

As the charging systems works to maintain the battery charge and manage vehicle electrical loads, it is normal for the voltmeter gauge on the instrument cluster or the system voltage display in the driver information center to fluctuate or change. This does not indicate a malfunction. Depending on the battery state of charge and the vehicle electrical load, these values may be anywhere from 12.5 V to 15.5 V.

# Electrical Power Management Description and Operation

## Electrical Power Management

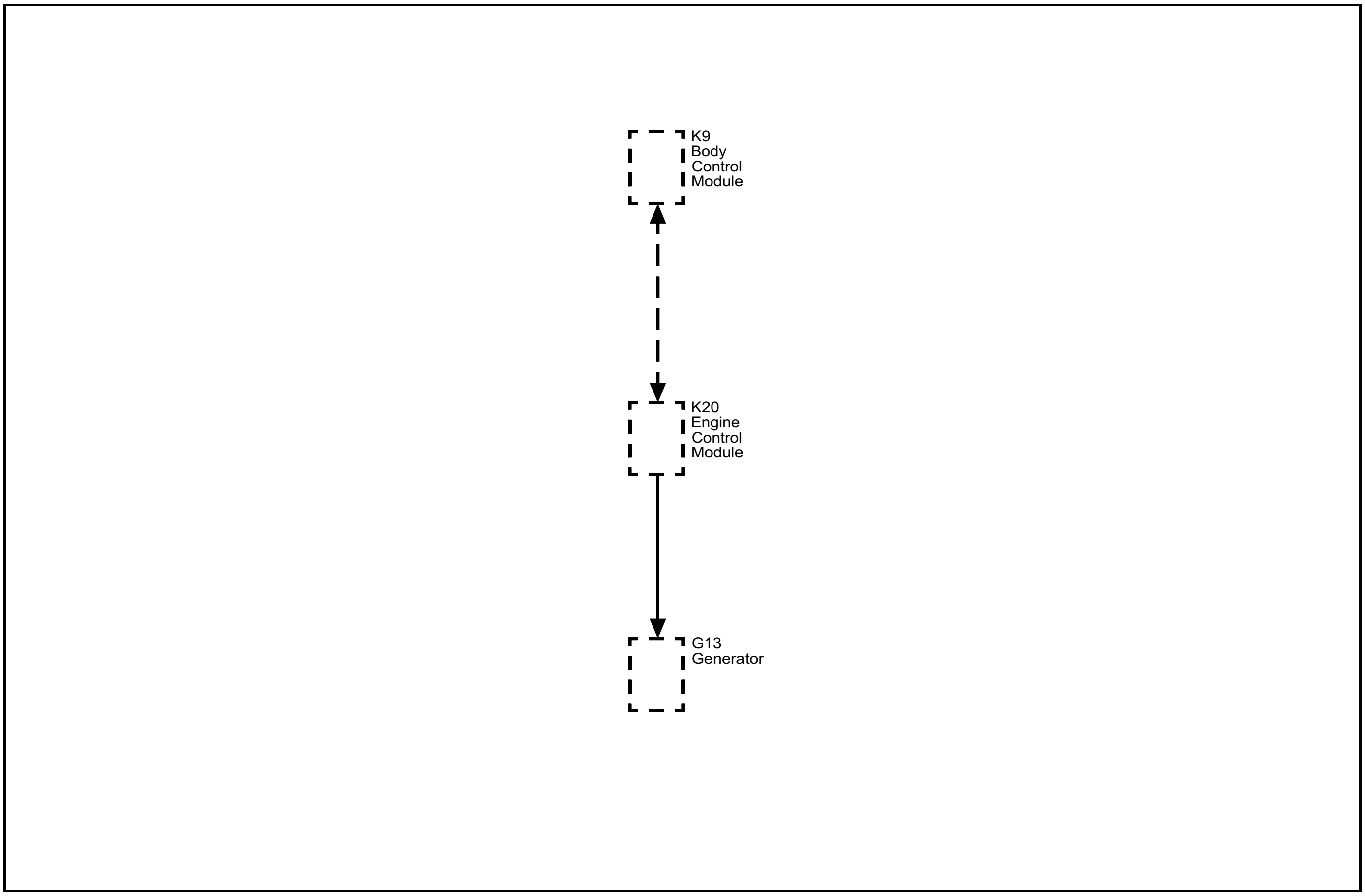
The electrical power management is used to monitor and control the charging system and alert the driver of possible problems within the charging system. The electrical power management system makes the most efficient use of the generator output, improves the battery state-of-charge, extends battery life, and manages system electrical loads.

The load shed operation is a means of reducing electrical loads during a low voltage or low battery state-of-charge condition.

The idle boost operation is a means of improving generator performance during a low voltage or low battery state-of-charge condition.

Each electrical power management function, either idle boost or load shed, is activated in incremental steps. For example, idle boost 1 must be active before idle boost 2 can be active. The criteria used by the body control module (BCM) to regulate electrical power management are outlined below:

## Electrical Power Management Block Diagram



## Idle Boost and Load Shed With Current Sensor

| Function | Battery Temperature Calculation | Battery Voltage Calculation | Amp-Hour Calculation | Action Taken |
|---|---|---|---|---|
| Idle Boost 1 Start | Less Than −15°C (5°F) | Less Than 13 V | — | First level Idle boost requested |
| Idle Boost 1 Start | — | — | Battery has a net loss greater than 0.6 Ah | First level Idle boost requested |
| Idle Boost 1 Start | — | Less Than 11 V | — | First level Idle boost requested |
| Idle Boost 1 End | Greater Than −10°C (14°F) | Greater Than 12 V | Battery has a net loss less than 0.2 Ah | First level Idle boost request cancelled |
| Idle Boost 2 Start | — | — | Battery has a net loss greater than 1.6 Ah | Second level Idle boost requested |
| Idle Boost 2 Start | — | Less Than 11 V | — | Second level Idle boost requested |
| Idle Boost 2 End | — | Greater Than 12 V | Battery has a net loss less than 0.8 Ah | Second level Idle boost request cancelled |
| Load Shed 1 Start | — | — | Battery has a net loss of 4 Ah | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 20% of their cycle |
| Load Shed 1 Start | — | Less Than 11 V | — | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 20% of their cycle |
| Load Shed 1 End | — | Greater Than 12 V | Battery has a net loss of less than 2 Ah | Clear Load Shed 1 |

## Idle Boost and Load Shed With Current Sensor (cont'd)

| Function | Battery Temperature Calculation | Battery Voltage Calculation | Amp-Hour Calculation | Action Taken |
|---|---|---|---|---|
| Idle Boost 3 Start | — | — | Battery has a net loss of 10 Ah | Third level Idle boost requested |
| Idle Boost 3 Start | — | Less Than 11 V | — | Third level Idle boost requested |
| Idle Boost 3 End | — | Greater Than 12 V | Battery has a net loss of less than 6.0 Ah | Third level Idle boost request cancelled |
| Load Shed 2 Start | — | — | Battery has a net loss greater than 12 Ah | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 2 Start | — | Less Than 11 V | — | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 2 End | — | Greater Than 12 V | Battery has a net loss of less than 8 Ah | Clear Load Shed 2 |
| Load Shed 3 Start | — | Less Than 11.9 V | Battery has a net loss greater than 20 Ah | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 3 Start | — | Less Than 11 V | — | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 3 End | — | Greater Than 12.6 V | Battery has a net loss of less than 13 Ah | Clear Load Shed 3 |

## Idle Boost and Load Shed Without Current Sensor (based on battery voltage)

| Function | Battery Temperature Calculation | Battery Voltage Calculation | Action Taken |
|---|---|---|---|
| Idle Boost 1 Start | Less Than −15°C (5°F) | Less Than 13 V | First level Idle boost requested |
| Idle Boost 1 Start | — | Less Than 12.6 V | First level Idle boost requested |
| Idle Boost 1 End | Greater Than −15°C (5°F) | — | First level Idle boost request cancelled |
| Idle Boost 1 End | — | Greater Than 13 V | First level Idle boost request cancelled |
| Idle Boost 2 Start | — | Less Than 12.4 V | Second level Idle boost requested |
| Idle Boost 2 End | — | Greater Than 12.5 V | Second level Idle boost request cancelled |

### Idle Boost and Load Shed Without Current Sensor (based on battery voltage) (cont'd)

| Function | Battery Temperature Calculation | Battery Voltage Calculation | Action Taken |
|---|---|---|---|
| Load Shed 1 Start | — | Less Than 12.3 V | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 20% of their cycle |
| Load Shed 1 End | — | Greater Than 12.4 V | Clear Load Shed 1 |
| Idle Boost 3 Start | — | Less Than 10 V | Third level Idle boost requested |
| Idle Boost 3 End | — | Greater Than 12.3 V | Third level Idle boost request cancelled |
| Load Shed 2 Start | — | Less Than 12.1 V | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 2 End | — | Greater Than 12.2 V | Clear Load Shed 2 |
| Load Shed 3 Start | — | Less Than 11.9 V | Rear Defrost, Heated Mirrors, Heated Seats, HVAC cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 3 End | — | Greater Than 12.0 V | Clear Load Shed 3 |

# Load Shed System Description and Operation

## Electrical Power Management

The electrical power management is used to monitor and control the charging system and alert the driver of possible problems within the charging system. The electrical power management system makes the most efficient use of the generator output, improves the battery state-of-charge, extends battery life, and manages system electrical loads.

The load shed operation is a means of reducing electrical loads during a low voltage or low battery state-of-charge condition.

The idle boost operation is a means of improving generator performance during a low voltage or low battery state-of-charge condition.

Each electrical power management function, either idle boost or load shed, is discrete. No two functions are active at the same time. Idle boost is activated in incremental steps, idle boost 1 must be active before idle boost 2 can be active. The criteria used by the body control module (BCM) to regulate electrical power management are outlined below:

| Function | Battery Temperature Calculation | Battery Voltage Calculation | Amp-Hour Calculation | Action Taken |
|---|---|---|---|---|
| Idle Boost 1 Start | Less Than −15°C (5°F) | Less Than 13 V | — | First level Idle boost requested |
| Idle Boost 1 Start | — | — | Battery has a net loss greater than 0.6 AH | First level Idle boost requested |
| Idle Boost 1 Start | — | Less Than 10.9 V | — | First level Idle boost requested |

| Function | Battery Temperature Calculation | Battery Voltage Calculation | Amp-Hour Calculation | Action Taken |
|---|---|---|---|---|
| Idle Boost 1 End | Greater Than −15°C (5°F) | Greater Than −12 V | Battery has a net loss less than 0.2 AH | First level Idle boost request cancelled |
| Load Shed 1 Start | — | — | Battery has a net loss of 4 AH | Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 20% of their cycle |
| Load Shed 1 Start | — | Less Than 10.9 V | — | Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 20% of their cycle |
| Load Shed 1 End | — | Greater Than 12 V | Battery has a net loss of less than 2 AH | Clear Load Shed 1 |
| Idle Boost 2 Start | — | — | Battery has a net loss greater than 1.6 AH | Second level Idle boost requested |
| Idle Boost 2 Start | — | Less Than 10.9 V | — | Second level Idle boost requested |
| Idle Boost 2 End | — | Greater Than 12 V | Battery has a net loss less than 0.8 AH | Second level Idle boost request cancelled |
| Idle Boost 3 Start | — | — | Battery has a net loss of 10.0 AH | Third level Idle boost requested |
| Idle Boost 3 Start | — | Less Than 10.9 V | — | Third level Idle boost requested |
| Idle Boost 3 End | — | Greater Than 12 V | Battery has a net loss of less than 6.0 AH | Third level Idle boost request cancelled |
| Load Shed 2 Start | — | Less Than 10.9 V | Battery has a net loss greater than 12 AH | Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 2 Start | — | Less Than 10.9 V | — | Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 50% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 2 End | — | Greater Than 12.6 V | Battery has a net loss of less than 10.5 AH | Clear Load Shed 2 |
| Load Shed 3 Start | — | Less Than 11.9 V | Battery has a net loss greater than 20 AH | Rear Defrost, Heated Mirrors, Heated Seats cycled OFF for 100% of their cycle. The BATTERY SAVER ACTIVE message will be displayed on the DIC |
| Load Shed 3 End | — | Greater Than 12.6 V | Battery has a net loss of less than 15 AH | Clear Load Shed 3 |

## Starting System Description and Operation

### Starter Motor Operation (Without KL9)

The starter motors are non-repairable. They have pole pieces that are arranged around the armature. Both solenoid windings are energized. The pull-in winding circuit is completed to the ground through the starter motor. The windings work together magnetically to pull and hold in the plunger. The plunger moves the shift lever. This action causes the starter drive assembly to rotate on the armature shaft spline as it engages with the flywheel ring gear on the engine. Moving at the same time, the plunger also closes the solenoid switch contacts in the starter solenoid. Full battery voltage is applied directly to the starter motor and it cranks the engine.

As soon as the solenoid switch contacts close, current stops flowing thorough the pull-in winding because battery voltage is applied to both ends of the windings. The hold-in winding remains energized. Its magnetic field is strong enough to hold the plunger, shift lever, starter drive assembly, and solenoid switch contacts in place to continue cranking the engine. When the engine starts, pinion overrun protects the armature from excessive speed until the switch is opened.

When the crank signal is removed, the starter relay opens and battery voltage is removed from the starter solenoid S terminal. Current flows from the motor contacts through both windings to the ground at the end of the hold-in winding. However, the direction of the current flow through the pull-in winding is now opposite the direction of the current flow when the winding was first energized.

The magnetic fields of the pull-in and hold-in windings now oppose one another. This action of the windings, along with the help of the return spring, causes the starter drive assembly to disengage and the solenoid switch contacts to open simultaneously. As soon as the contacts open, the starter circuit is turned off.

## Enhanced Starter Motor Operation (KL9)

The Engine Stop/Start system in GM vehicles automatically turns off the engine when the vehicle comes to a stop under certain driving conditions, and can quickly restart the engine in about 0.3 seconds when commanded to do so.

In order to smoothly restart the engine as quickly as possible while managing the greater number of engine starts, the Stop/Start system uses an enhanced starter motor that operates differently from a conventional starter motor. It has a high performance electric motor and a stronger pinion engagement mechanism than a conventional starter. It also has independent control of the pinion and motor.

The enhanced starter motor continues using the typical pinion engagement mechanism with a starter solenoid that drives the pinion gear to engage or disengage the flywheel of the engine. When engaged, the starter motor can rotate the engine flywheel and, in turn, the crankshaft.

On the enhanced starter of a Stop/Start system the operation is done in two separate functions inside the solenoid, Starter Motor and Pinion Actuator. Each function controlled individually by the ECM. There are two separate relays to control the two separate parts of the enhanced solenoid:

- KR27 Starter Motor Relay
- KR27C Starter Pinion Actuator Relay

The two individually-controlled relays allow for smooth engagement of the pinion gear into the flywheel with minimum noise and wear.

When the vehicle is coming to a stop, just before the engine stops rotating (at approximately 50 RPM) during stop/start operation, the ECM energizes the Starter Pinion Solenoid Actuator Relay to easily push the pinion gear into the flywheel gear without gear clash. (Fig. 8) When the engine stops rotating during Stop/Start operation (Auto Stop mode), the starter pinion gear is fully engaged, ready for the starter motor to become energized to quickly start the engine again.

A secondary need for the starter pinion to be driven into the flywheel gear before the engine stops rotating is to address quickly changing demands on the engine. For example, when a driver is slowing nearly to a stop — and the Stop/Start system is preparing for Auto Stop mode — but suddenly decides to release the brake and accelerate

In this situation, the engine has already stopped rotating, or nearly so. A conventional starter cannot restart the engine until the engine has completely stopped. However, with the enhanced starter, the starter pinion gear is fully engaged and ready to begin rotating the engine even before it fully stops turning. Otherwise, the engine would actually have to stop rotating before the pinion can engage smoothly to begin a restart.

To prevent a lag in engine operation, the ECM uses predictive speed matching of the flywheel gear speed and the pinion gear speed to engage the pinion gear into the flywheel gear without gear clash before the engine fully stops. By predicting how long it takes the starter motor to spin up using an algorithm, the pinion gear speed can be matched to the flywheel gear speed. The result is an almost instant restart that is possible at extremely low engine speeds.

## Circuit Description

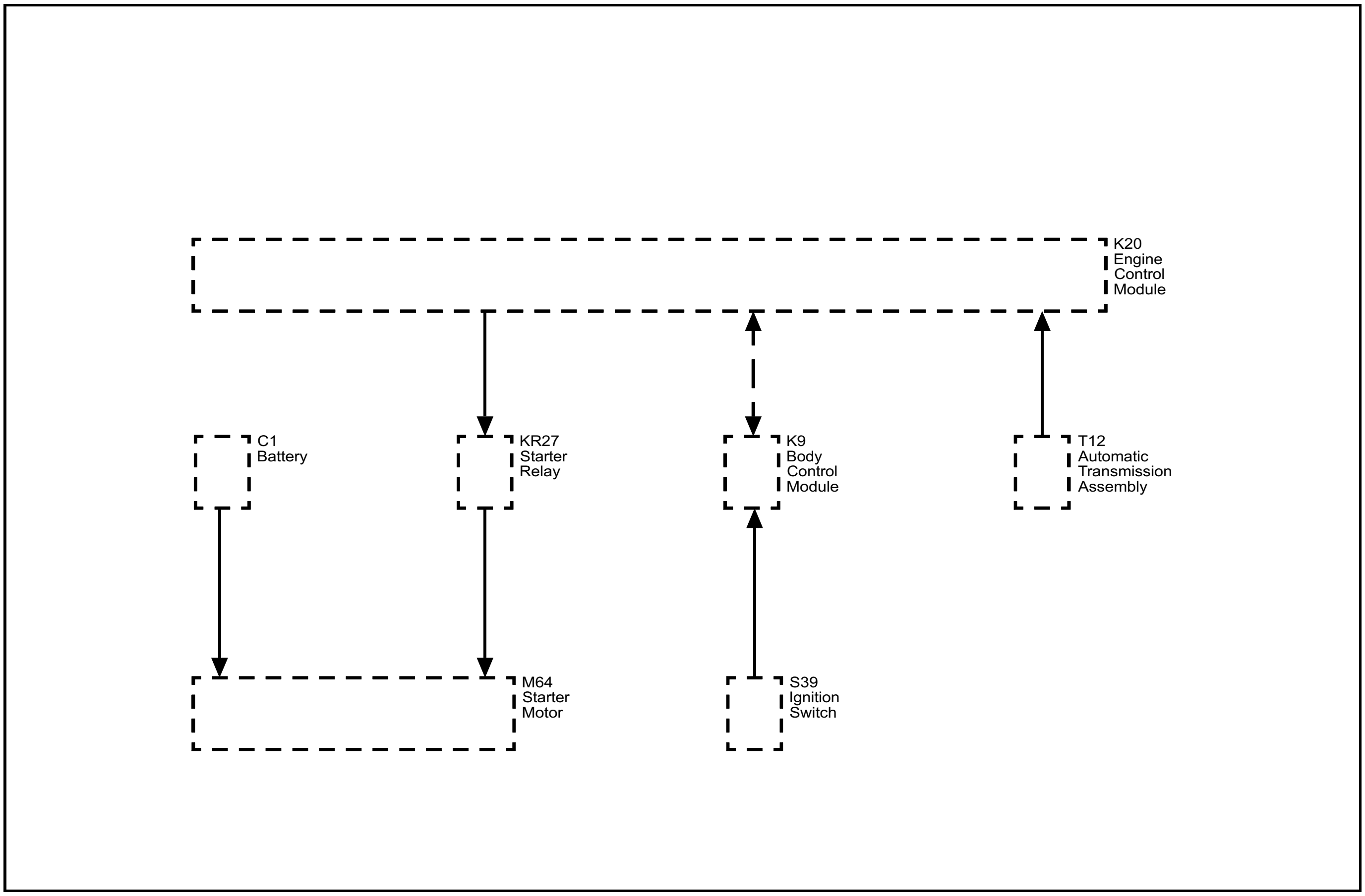
### Keyless Start

When the Ignition mode switch is placed in the crank position, a discrete signal is supplied to the body control module (BCM) notifying it that the ignition is in the crank position. The BCM then sends a serial data message to the engine control module (ECM) that crank has been requested. The ECM then verifies that the clutch is fully depressed or the automatic transmission is in Park/Neutral. If it is, the ECM then supplies 12 V to the control circuit of the starter relay. When this occurs, battery positive voltage is supplied through the switch side of the crank relay to the S terminal of the starter solenoid.

### Key Start

When the ignition switch is placed in the Start position, a discrete signal is supplied to the body control module (BCM) notifying it that the ignition is in the Start position. The BCM then sends a message to the engine control module (ECM) notifying it that CRANK has been requested. The ECM verifies that the transmission is in Park or Neutral. If it is, the ECM then supplies 12 V to the control circuit of the crank relay. When this occurs, battery positive voltage is supplied through the switch side of the crank relay to the S terminal of the starter solenoid.

## Starting System Block Diagram



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## Stop/Start System Description and Operation (with KL9)

The Stop/Start System is used to improve fuel efficiency in stop/start driving. The vehicle automatically shuts down the engine in appropriate conditions at a traffic light, for example, resulting in zero tail pipe emissions and saving fuel which otherwise is used idling the engine when stationary. The engine instantly restarts when the driver is ready to move away.

As soon as the driver prepares to move away (by releasing the brake pedal and/or depressing the accelerator pedal), the engine will start; it only takes the system around 0.3 s to start the engine.

To support the increased number of engine starts, the starter motor is upgraded with a high performance electric motor and a stronger pinion engagement mechanism with reduced noise levels.

Along with the upgraded starter motor, advanced battery technology is required to ensure the vehicles battery can handle the frequent charge and discharge cycles common with stop/start operation. There is an intelligent battery sensor connected to the battery which continually monitors the battery charge and healthy state. The engine control module (ECM) uses this information from the intelligent battery sensor to determine if the battery charge and health is sufficient for an Stop/Start condition.

The Stop/Start system can reduce fuel consumption and carbon dioxide ($CO2$) emissions by up to 5% in mixed driving conditions. In an urban environment and in heavy traffic with frequent stops the savings may increase to as much as 10%.

There are also sophisticated controls in place to help ensure the Stop/Start System does not compromise the needs of either the driver or vehicle. For the engine to shutdown, the vehicle must be below 5 km/h (3 MPH), the selector lever in position D, and brake pedal depressed. To restart, the driver simply releases the brake pedal and the enhanced starter motor engages the engine. When the engine has been shut down by the Stop/Start System, a control indicator will be illuminated in the Driver Information Center (DIC). When the engine is restarted, the control indicator in the DIC extinguishes.

To ensure neither the needs of the driver or vehicle are compromised the engine will not shut down in the following circumstances:

- Ambient and coolant temperature correlation does not match specified values.
- Ambient temperature is less than −10°C (14°F)
- Battery temperature is less than 0°C (32°F) or greater than 55°C (131°F)
- Driver seat belt is not fastened and the drivers door is not fully closed (not applicable to vehicles in North America)
- HVAC system demand is high

- HVAC defrost has been selected
- Battery charge is low
- The learn procedure needs to be completed on the Battery Sensor Module

Likewise the engine will automatically restart if:

- Driver door opened and driver seat belt unbuckled (not applicable to vehicles in North America)
- Engine hood opened
- Battery charge is low
- HVAC demand increases
- Vehicle speed increases
- Brake booster vacuum has been reduced
- Engine coolant temperature is greater than 125°C (257°F)
- Economy mode turned OFF by driver
- Autostop time exceeded 2 min

When the Stop/Start System has shut down the engine, and the ambient temperature is below 15°C (59°F), the ECM will activate the Stop/Start auxiliary relay which controls the electric engine coolant pump motor to continually circulate the engine coolant through the engine while the engine is off. This is to ensure the engine and passenger compartment temperature is maintained while off. Once the Stop/Start System has restarted the engine, the ECM will turn off the electric coolant pump motor, thus allowing the engines internal coolant pump to circulate the engine coolant. The Stop/Start System is automatically activated each time the ignition switch is turned on, although there is an ECO Switch on the instrument panel to disable the system, if the driver so desires.

## Autostop Criteria

The ECM will send an Autostop state message to the body control module (BCM) and shut down the engine when all of the following criteria is met. The BCM will transmit the Autostop state message to the instrument cluster which will display the Autostop indicator in the tachometer display.

- Economy mode turned ON
- Initial minimum vehicle speed during drive cycle must be 19 km/h (12 MPH) or greater. Subsequent autostop minimum speed may vary from 2-10 km/h (1-6 MPH), depending on vehicle
- Ambient and engine coolant temperature correlation meets specified values.
- Ambient and transmission fluid temperature correlation meets specified values.
- Hood switch status is closed
- Driver door status is closed
- Driver seat belt status is buckled
- Brake booster vacuum is greater than 45 kPa (7 PSI)
- Transmission gear selector is in the Drive position
- Vehicle speed is less than 5 km/h (3 MPH)
- Engine speed is below 1 500 RPM
- Engine coolant temperature is less than 120°C (248°F)
- Ambient temperature is greater than −10°C (14°F)
- No A/C compressor request from HVAC (A/C or Defrost modes)
- Battery voltage greater than 12 V
- Battery state of charge greater than 75% (changes with state of health)

### Autostop Enable Ambient and Engine Coolant Temperature Table

| Ambient Temperature | inimum Coolant Temperature | Autostop Enable |
|---|---|---|
| −10°C (14°F) | 60°C (140°F) | Yes |
| 0°C (32°F) | 50°C (122°F) | Yes |
| 6°C (43°F) | 40°C (104°F) | Yes |
| 12°C (54°F) | 30°C (86°F) | Yes |
| 20°C (68°F) | 18°C (64°F) | Yes |
| 30°C (86°F) | 18°C (64°F) | Yes |

## Autostart Criteria

The ECM will send an Autostart state message to the BCM. If all of the following conditions are true the ECM and BCM will restart the vehicle.

Driver Enabled Conditions that will engage Autostart:

- Driver removes pressure from the brake or depresses the accelerator pedal while the vehicle is in the forward Drive gear

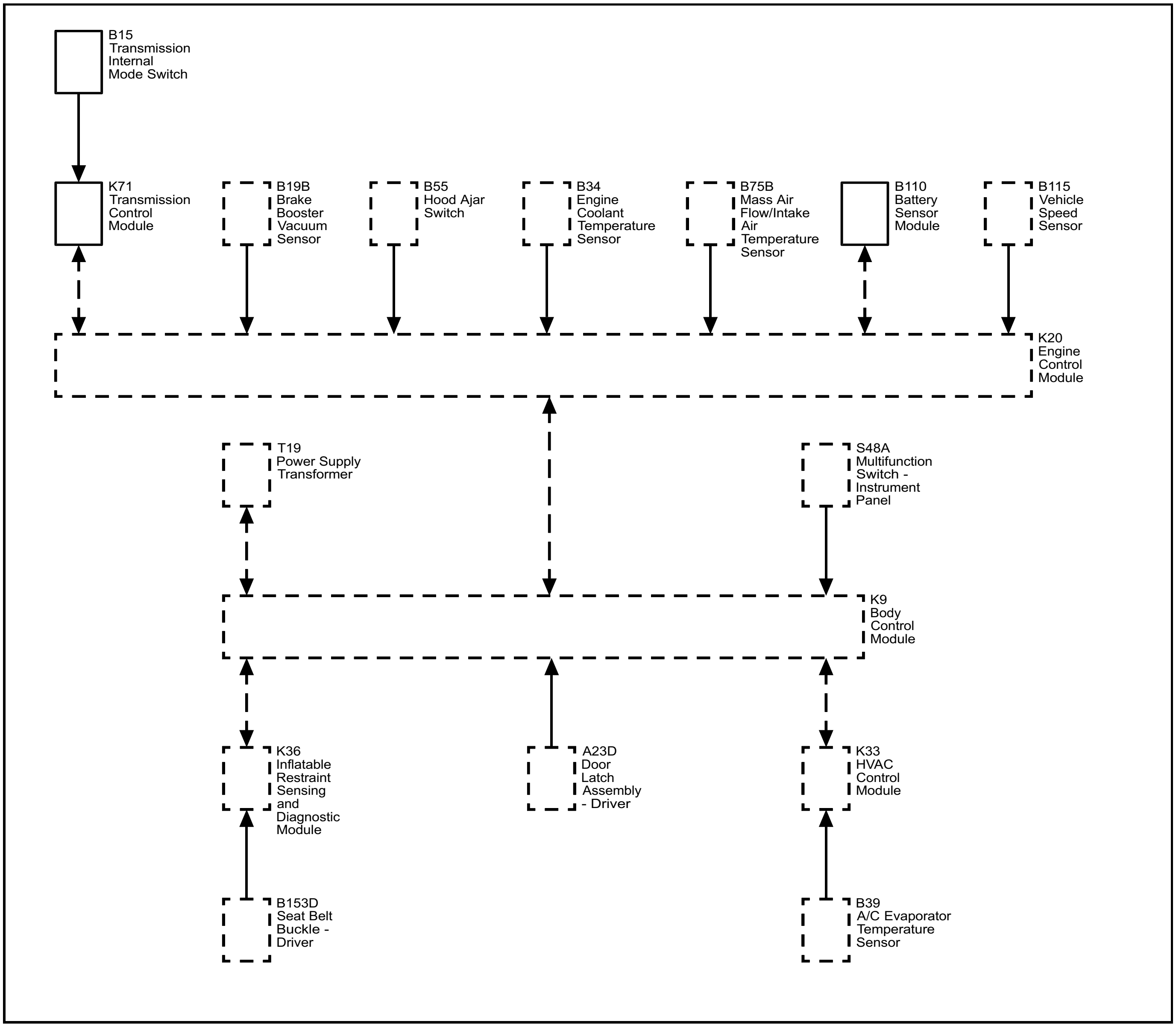
System Enabled Conditions that will engage Autostart

**Note:** If one or more of the following conditions occur, the system will force the engine to restart.

- Economy mode turned OFF
- Brake booster vacuum is less than 40 kPa (6 PSI)
- HVAC inside air temperature changes than 3°C (5°F) (with HVAC Automatic)
- A/C compressor request from HVAC (A/C or Defrost modes)
- Battery voltage less than 11 V,
- Battery state of charge is less than 73% (changes with state of health)
- Driver door status changes to open and driver seat belt status changes to unbuckled (not applicable to vehicles in North America)
- Hood switch status changes to open
- Autostop time exceeded 2 min

If the crank time exceeds 2 s, a manual ignition switch restart will be necessary.

## Start Stop Block Diagram


B15
Transmission Internal Mode Switch
K71
Transmission Control Module
B19B
Brake Booster Vacuum Sensor
B55
Hood Ajar Switch
B34
Engine Coolant Temperature Sensor
B75B
Mass Air Flow/Intake Air Temperature Sensor
B110
Battery Sensor Module
B115
Vehicle Speed Sensor
K20
Engine Control Module
T19
Power Supply Transformer
S48A
Multifunction Switch - Instrument Panel
K9
Body Control Module
K36
Inflatable Restraint Sensing and Diagnostic Module
A23D
Door Latch Assembly - Driver
K33
HVAC Control Module
B153D
Seat Belt Buckle - Driver
B39
A/C Evaporator Temperature Sensor

4148368

## System Components

### Engine Control Module (ECM)

The engine control module (ECM) monitors the inputs from the engine coolant temperature (ECT) sensor, vehicle speed sensor (VSS), hood ajar switch, brake booster vacuum sensor, the clutch pedal position sensor, the manual transmission neutral position switch and engine speed to determine Autostart and Autostop conditions. The ECM also controls the auxiliary coolant pump motor.

### Transmission Control Module (TCM)

The transmission control module monitors the inputs from the transmission neutral safety switch to determine the driver selected gear. This information is transmitted to the ECM via serial data to support the Auto Stop Start algorithm.

### Engine Coolant Temperature sensor

The ECT sensor is used to determine engine operating temperature.

### Intake Air Temperature Sensor

The ECM uses this sensor to monitor ambient air temperature. If too cold, the Autostop will not occur.

### Inside air temperature sensor

The HVAC control module monitors the passenger compartment temperature sensor to determine the temperature inside the passenger compartment. The HVAC control module sends this temperature reading to the ECM on the data communication circuit. The ECM uses this temperature values to determine if a restart is requires based on the temperature inside the passenger compartment.

### Vehicle speed sensor

The vehicle speed sensor is used to determine vehicle speed. If vehicle speed is detected above a calculated value during an Autostop condition, the ECM will start the engine.

### Hood Ajar Switch

If the hood switch is in the open position, the vehicle will not Autostop. If the hood is opened during Autostop, the vehicle will automatically restart.

### Brake Booster Vacuum Sensor

The ECM monitors vacuum in order to ensure proper power assist for the brake pedal. If the ECM determines vacuum is too low, it will restart the engine.

### Brake Pedal Position Sensor & Accelerator Pedal Position Sensor

The ECM monitors both the brake pedal position sensor and the accelerator pedal position sensor to determine the level of activation for each. While the accelerator pedal is in it’s at rest position with no pressure applied by the operator, a partially depressed Brake pedal will cause the ECM to prepare the engine for an Autostop event. When the vehicle is in an auto stop event and the status of the brake pedal position sensor changes from meeting the autostop criteria to not meeting this criteria the engine will be restarted provided all of the other conditions to allow an autostart are met. If the Accelerator pedal is moved from its at rest position the vehicle will also enter an auto start event if all other conditions to support an autostart event, except for the brake pedal position, are met.

### Transmission Gear Shift Position Switch

The transmission gear shift position switch is used to determine if the transmission is in the proper state to allow an auto stop/start event. The ECM will not allow Autostop until the brake is engaged, the transmission is in the forward gear position and then the vehicle slows to below the minimum speed required to allow and autostop while meeting all of the other minimum criteria to support an autostop event.

### Coolant Pump Motor

The ECM will turn on the auxiliary coolant pump motor during Autostop to maintain engine operating temperature and also maintain HVAC temperature. Once the engine is running, the ECM will turn off the coolant pump motor.

### Body Control Module (BCM)

The body control module (BCM) monitors the ECO switch in order to enable or disable the system. It is also the master of the low speed communication bus and transfers the appropriate messages to the instrument cluster and the HVAC.

### Intelligent Battery Sensor

The ECM monitors the intelligent battery sensor for battery state of current, state of health, and battery charge via the data communication bus. If the battery is determined to be in poor state of health or having a low charge, the ECM will not allow Autostop to occur.

### ECO Switch

The ECO switch can disable the Autostart system if desired.

### Power Supply Transformer

The DC to DC converter monitors battery voltage and will maintain operating voltage to the radio, instrument cluster and instrument panel displays. The DC to DC converter will provide a boosted voltage to sensitive loads during Autostart to ensure proper operation of the driver informational displays.

### Driver Door Switch

The BCM monitors the driver door switch at all times. The BCM will not allow Autostop if the door is ajar and will Autostart if the driver door is opened and the seat belt unbuckled during Autostop.

### Driver Seat Belt Switch

The BCM monitors the driver seat belt switch at all times. The BCM will Autostart if the seat belt is unbuckled and the driver door opened during Autostop.

### Instrument Cluster

In order to differentiate between a normal engine shut down (engine speed 0 RPM) and when the engine has been shut down by the Stop/Start System, the tachometer needle will rest at the Autostop indicator icon (500 RPM point) indicating the engine has been shut down by the Stop/Start System. Once the engine is restarted, or the ECO button has disengaged Autostop, the tachometer will function normally.

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# Section 5

# HVAC

**HVAC - Automatic** . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5-3
  **Schematic and Routing Diagrams** . . . . . . . . . . . . . . 5-3
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    Manual HVAC Description and Operation . . . . . . 5-23

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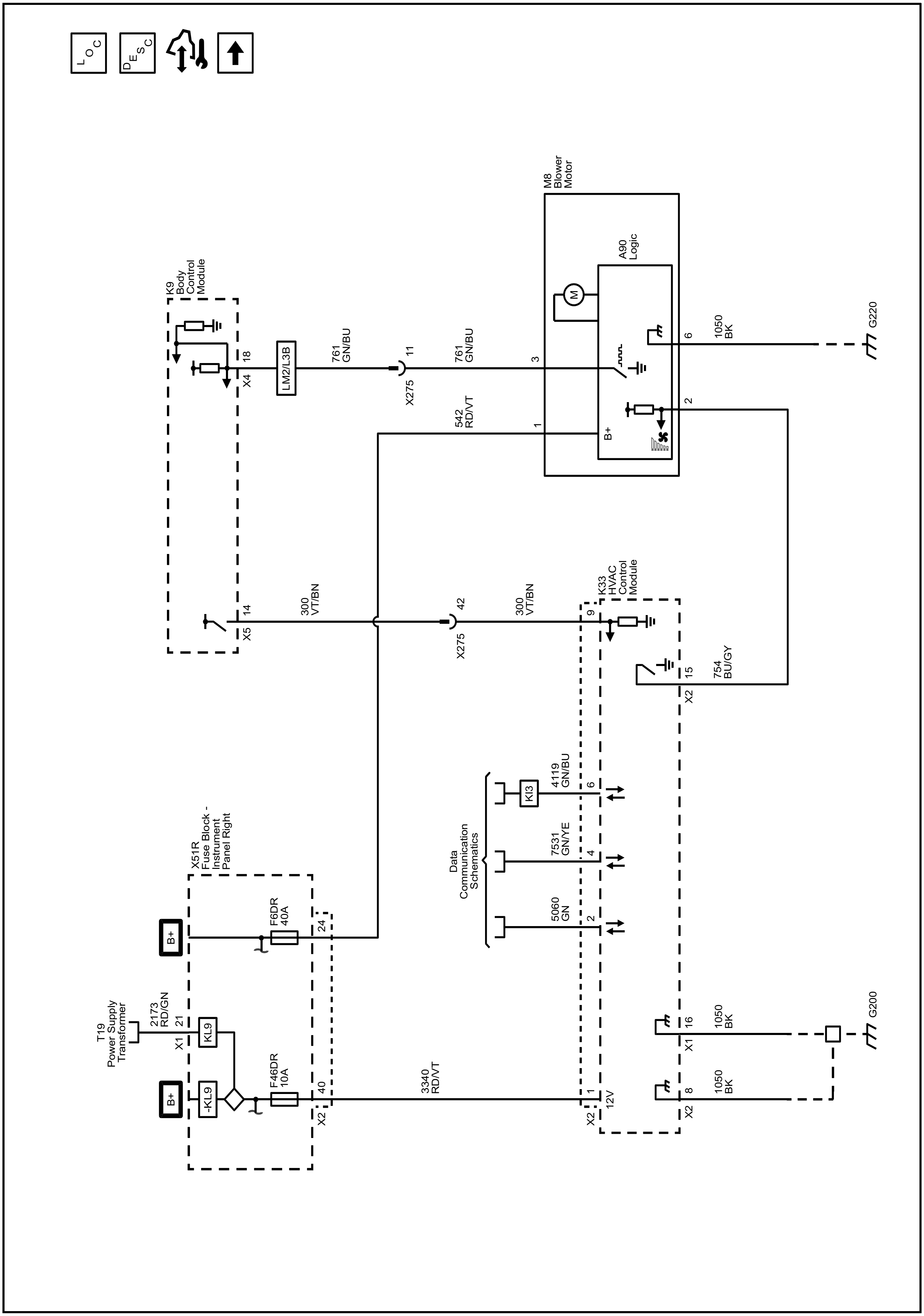
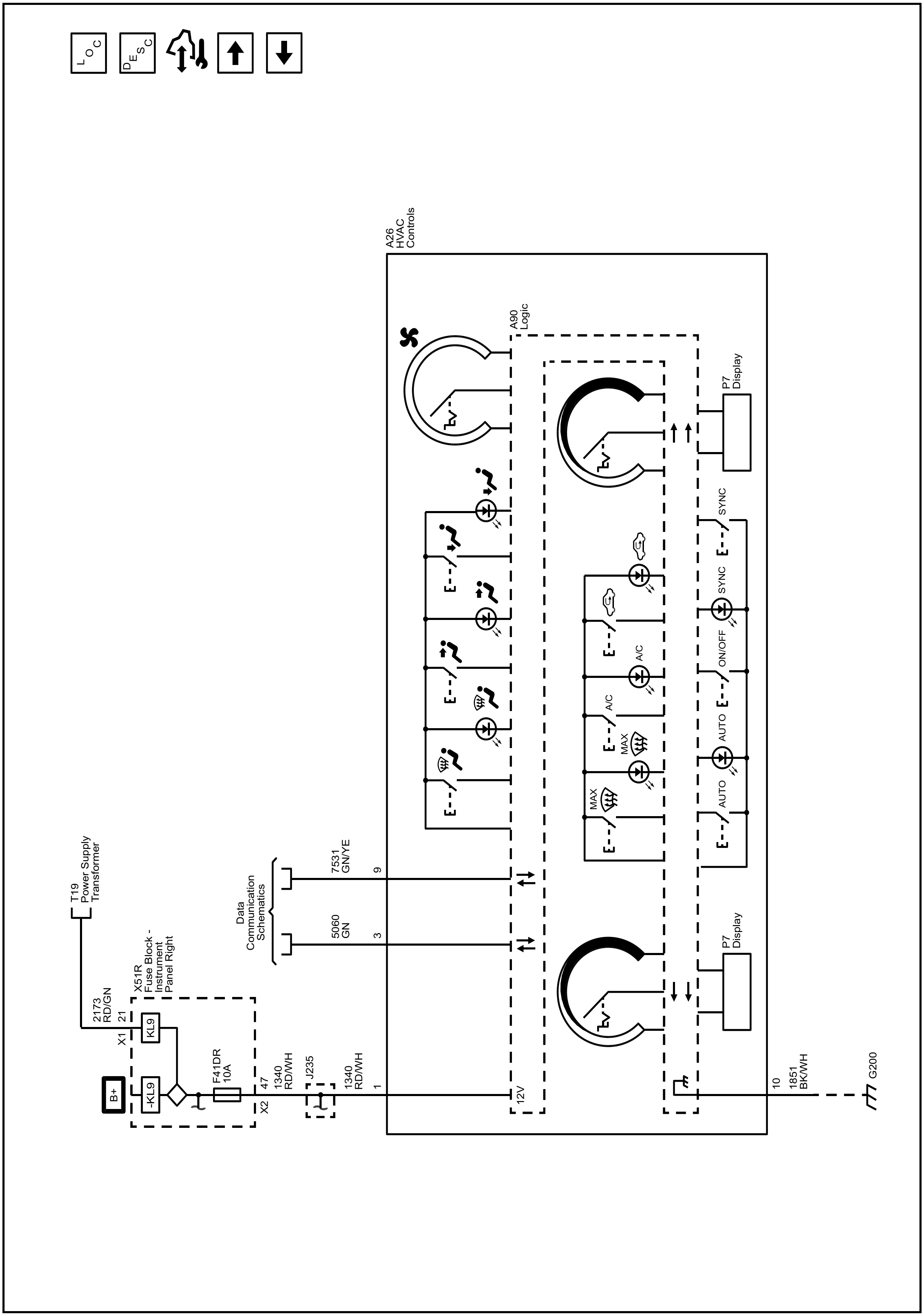
# HVAC - Automatic

## Schematic and Routing Diagrams

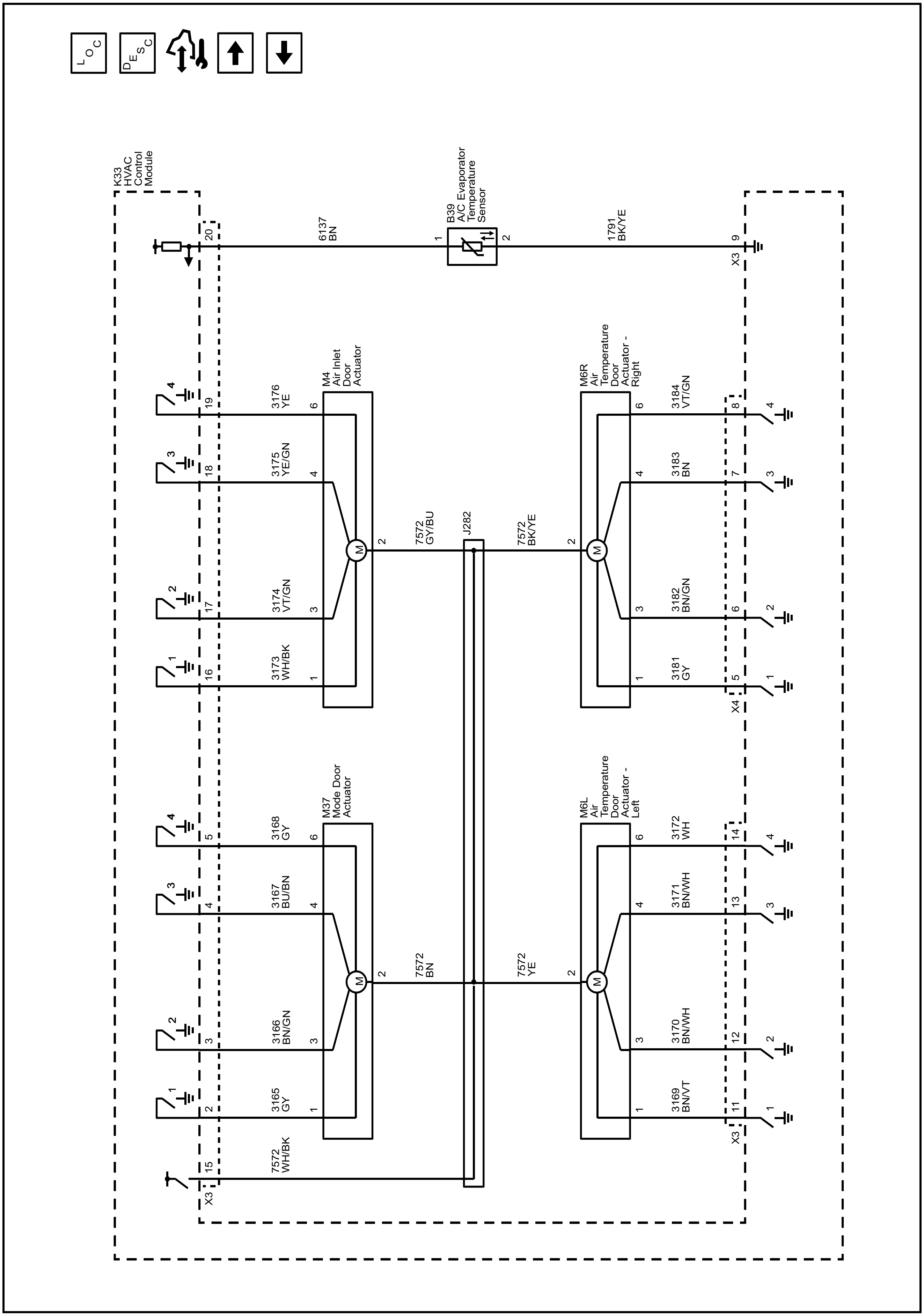
## HVAC Schematics (CJ2) (HVAC Module Power, Ground, Serial Data, and Blower Motor)


L O C
D E S C
5020945
K9 Body Control Module
X4
18
LM2/L3B
761 GN/BU
X275
11
761 GN/BU
M8 Blower Motor
A90 Logic
M
3
1
2
6
B+
542 RD/VT
1050 BK
G220
X5
14
300 VT/BN
X275
42
300 VT/BN
K33 HVAC Control Module
9
X2
15
754 BU/GY
Data Communication Schematics
KI3
4119 GN/BU
6
7531 GN/YE
4
5060 GN
2
X51R Fuse Block - Instrument Panel Right
B+
F6DR 40A
24
T19 Power Supply Transformer
2173 RD/GN
X1
21
KL9
-KL9
B+
F46DR 10A
40
X2
3340 RD/VT
X2
1
12V
X1
16
X2
8
1050 BK
1050 BK
G200

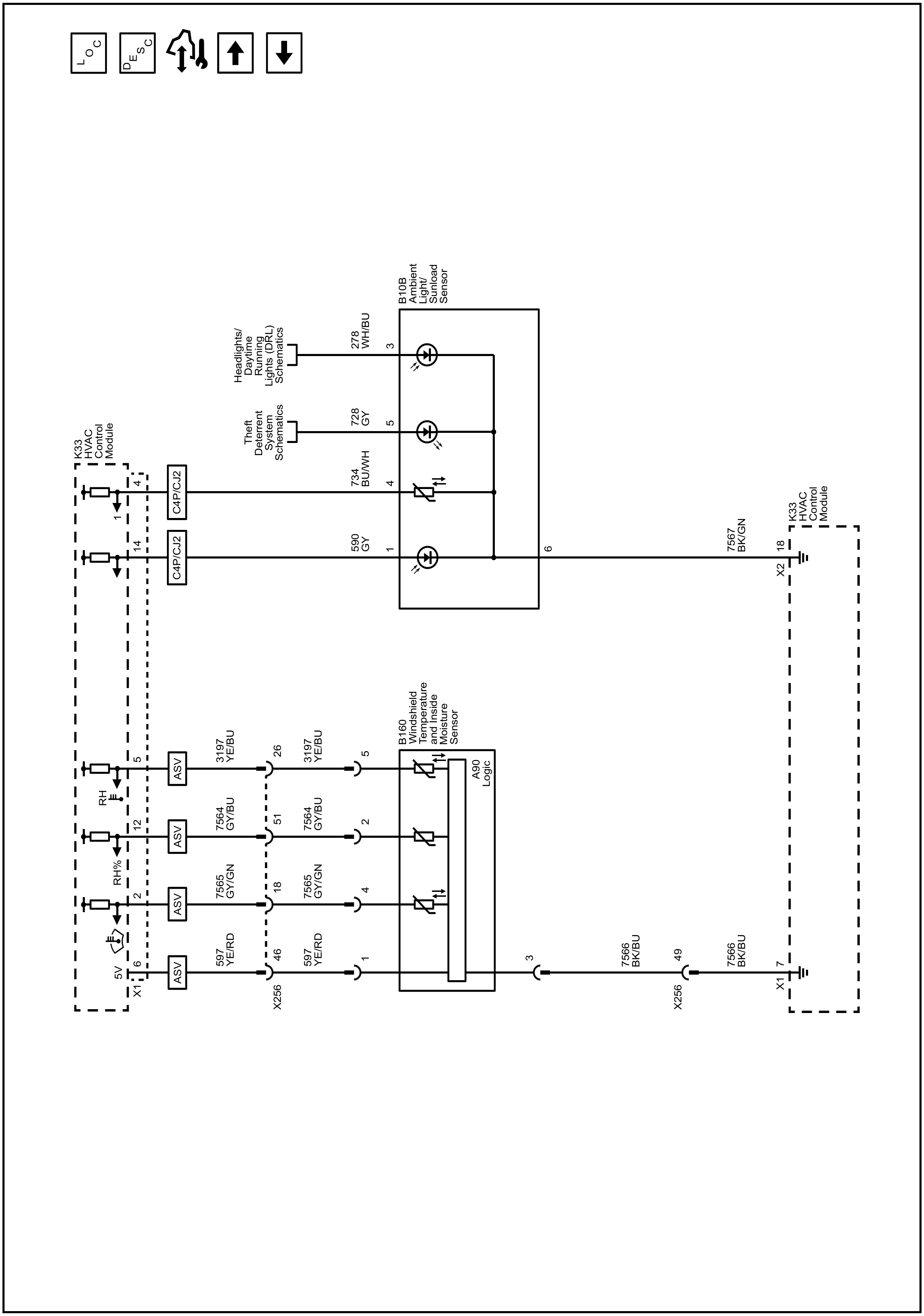
## HVAC Schematics (CJ2) (HVAC Controls)


5020946
LOC
DESC
T19 Power Supply Transformer
2173 RD/GN
21
X1
KL9
X51R Fuse Block - Instrument Panel Right
B+
-KL9
F41DR 10A
47
X2
1340 RD/WH
J235
1340 RD/WH
1
Data Communication Schematics
5060 GN
3
7531 GN/YE
9
A26 HVAC Controls
A90 Logic
12V
P7 Display
P7 Display
MAX
MAX
A/C
A/C
AUTO
AUTO
ON/OFF
SYNC
SYNC
10
1851 BK/WH
G200

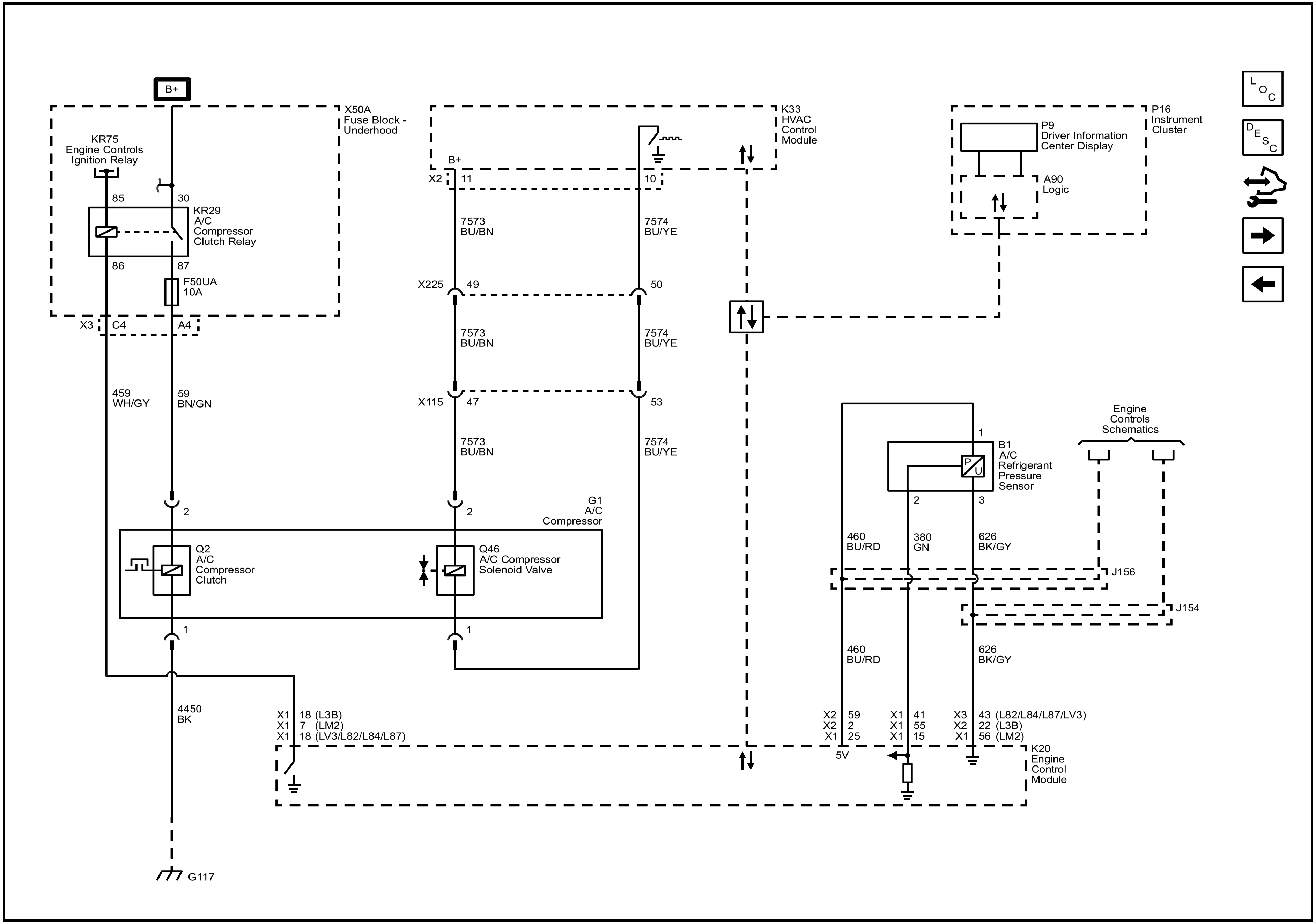
## HVAC Schematics (CJ2) (Temperature and Mode)


5020947
K33 HVAC Control Module
B39 A/C Evaporator Temperature Sensor
6137 BN
1791 BK/YE
X3
20
9
1
2
M4 Air Inlet Door Actuator
M6R Air Temperature Door Actuator - Right
M37 Mode Door Actuator
M6L Air Temperature Door Actuator - Left
J282
M
3176 YE
3175 YE/GN
3174 VT/GN
3173 WH/BK
7572 GY/BU
7572 BK/YE
3184 VT/GN
3183 BN
3182 BN/GN
3181 GY
3168 GY
3167 BU/BN
3166 BN/GN
3165 GY
7572 BN
7572 YE
3172 WH
3171 BN/WH
3170 BN/WH
3169 BN/VT
7572 WH/BK
19
18
17
16
15
5
4
3
2
6
1
8
7
X4
14
13
12
11

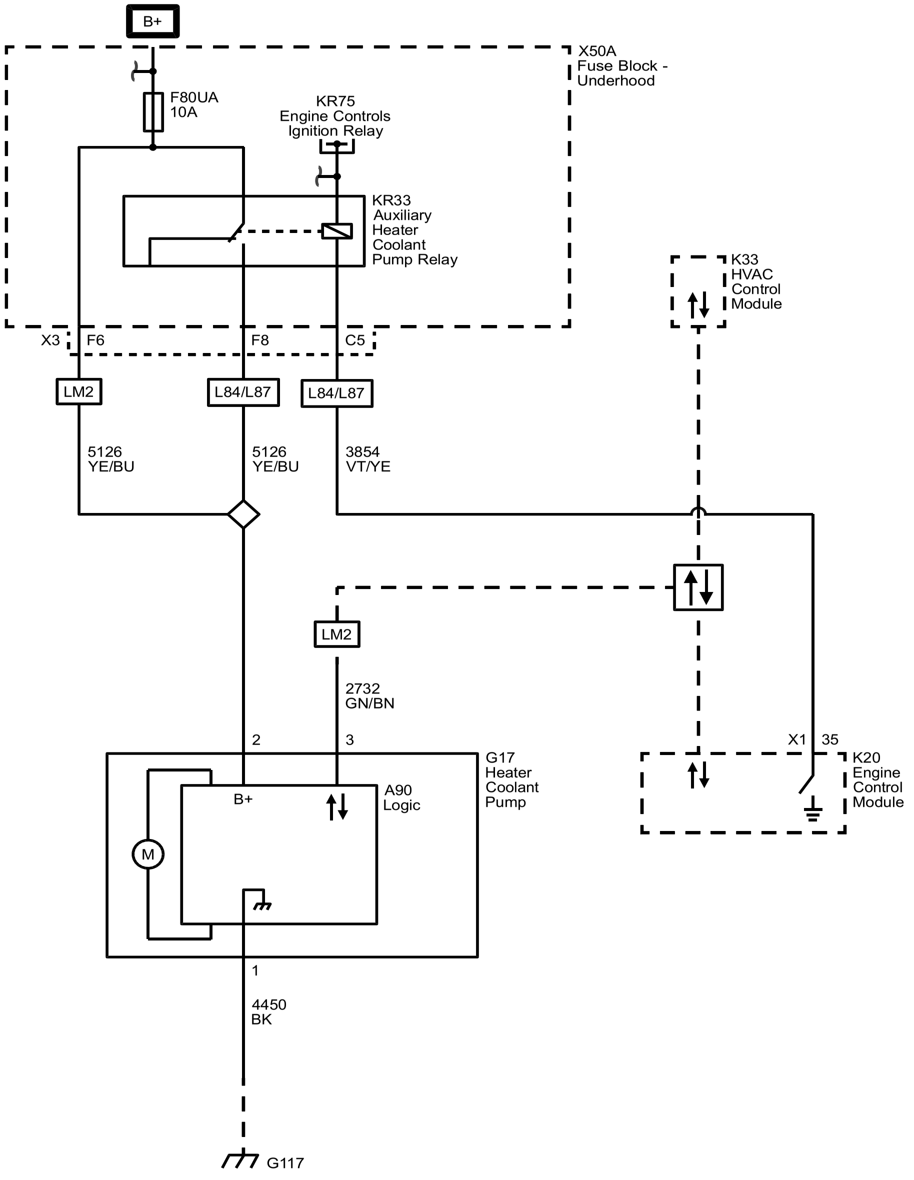
## HVAC Schematics (CJ2) (Windshield and Sunload Sensors (ASV/C4P/CJ2))


5020948
LOC
DESC
K33 HVAC Control Module
X1
5V
6
RH%
2
12
RH
5
1
4
14
ASV
C4P/CJ2
597 YE/RD
7565 GY/GN
7564 GY/BU
3197 YE/BU
734 BU/WH
590 GY
X256
46
18
51
26
Theft Deterrent System Schematics
Headlights/ Daytime Running Lights (DRL) Schematics
728 GY
278 WH/BU
B160 Windshield Temperature and Inside Moisture Sensor
A90 Logic
B10B Ambient Light/ Sunload Sensor
3
6
7566 BK/BU
49
7567 BK/GN
X2
18
7

# HVAC Schematics (CJ2) (A/C Compressor Controls)

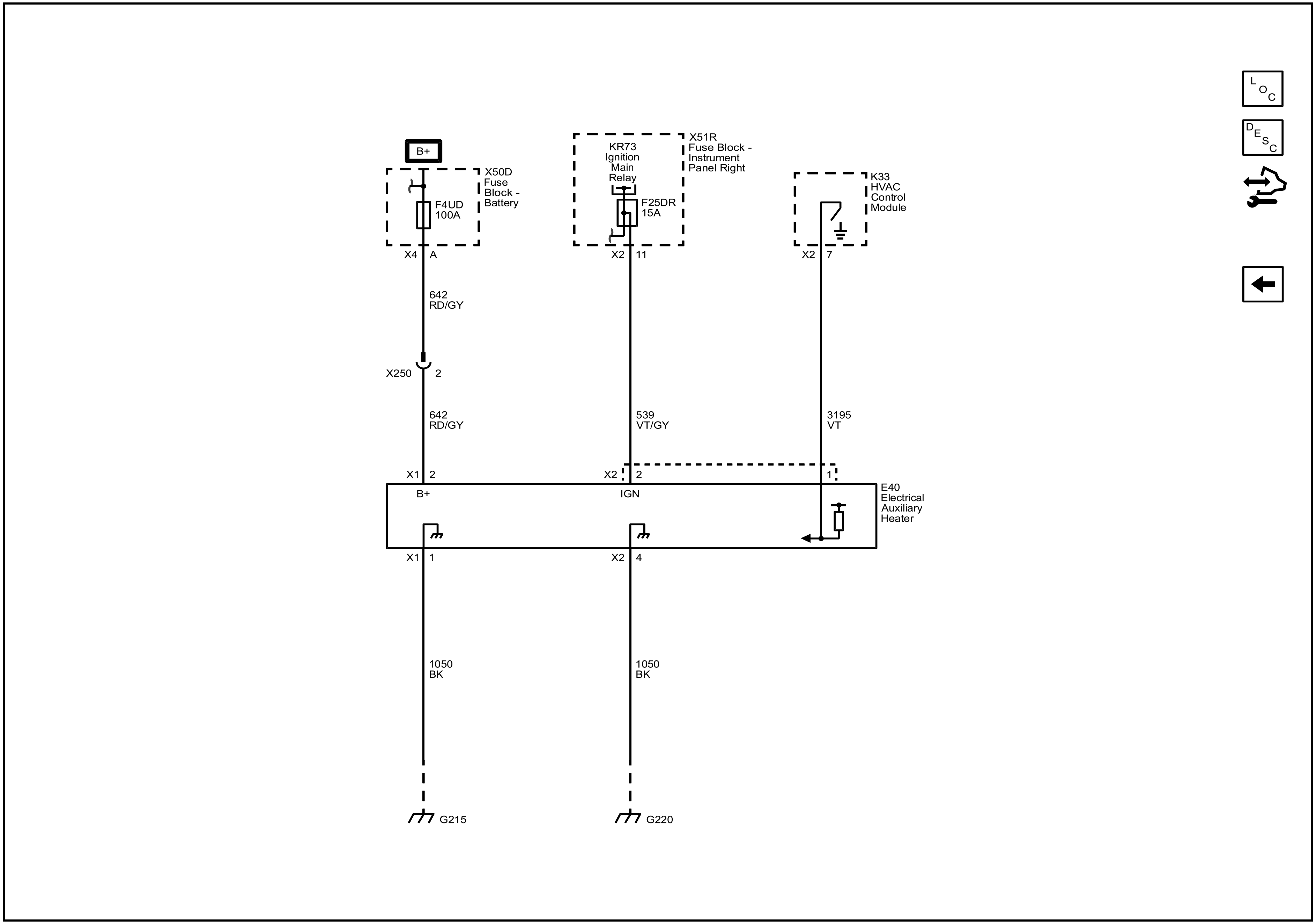

B+
X50A
Fuse Block -
Underhood
KR75
Engine Controls
Ignition Relay
85
30
KR29
A/C
Compressor
Clutch Relay
86
87
F50UA
10A
X3
C4
A4
459
WH/GY
59
BN/GN
K33
HVAC
Control
Module
B+
X2
11
10
7573
BU/BN
7574
BU/YE
X225
49
50
X115
47
53
2
G1
A/C
Compressor
Q2
A/C
Compressor
Clutch
Q46
A/C Compressor
Solenoid Valve
1
4450
BK
G117
X1 18 (L3B)
X1 7 (LM2)
X1 18 (LV3/L82/L84/L87)
P16
Instrument
Cluster
P9
Driver Information
Center Display
A90
Logic
Engine
Controls
Schematics
B1
A/C
Refrigerant
Pressure
Sensor
P
U
3
460
BU/RD
380
GN
626
BK/GY
J156
J154
X2 59
X2 2
X1 25
X1 41
X1 55
X1 15
X3 43 (L82/L84/L87/LV3)
X2 22 (L3B)
X1 56 (LM2)
5V
K20
Engine
Control
Module
5020950

## HVAC Schematics (CJ2) (Heater Coolant Pump (KL9))


B+
X50A
Fuse Block -
Underhood
F80UA
10A
KR75
Engine Controls
Ignition Relay
KR33
Auxiliary
Heater
Coolant
Pump Relay
X3
F6
F8
C5
LM2
L84/L87
L84/L87
5126
YE/BU
5126
YE/BU
3854
VT/YE
K33
HVAC
Control
Module
LM2
2732
GN/BN
2
3
G17
Heater
Coolant
Pump
B+
A90
Logic
M
X1
35
K20
Engine
Control
Module
1
4450
BK
G117

5043675

# HVAC Schematics (CJ2) (Auxiliary Heater (C32))


LOC
DESC
B+
X50D Fuse Block - Battery
F4UD 100A
X4 A
642 RD/GY
X250 2
642 RD/GY
X1 2
B+
X51R Fuse Block - Instrument Panel Right
KR73 Ignition Main Relay
F25DR 15A
X2 11
539 VT/GY
X2 2
IGN
K33 HVAC Control Module
X2 7
3195 VT
1
E40 Electrical Auxiliary Heater
X1 1
1050 BK
G215
X2 4
1050 BK
G220
5020951

# Description and Operation

## Automatic HVAC Description and Operation

The air temperature and the air delivery description and operation are divided into eight areas:

- HVAC Control Components
- Air Speed
- Air Delivery
- Heating and A/C Operation
- Recirculation Operation
- Automatic Operation
- Engine Coolant and A/C System Refrigerant

## HVAC Control Components

### HVAC Controls

The HVAC controls contains all switches, buttons, and dials which are required to control the functions of the HVAC system and serve as interface between the operator and the HVAC control module. The selected values are passed to the HVAC control module via LIN-Bus.

### HVAC Control Module

The HVAC control module is a GMLAN device that interfaces between the operator and the HVAC system to maintain and control desired air temperature and air distribution settings. The battery positive voltage circuit provides power that the HVAC control module uses for keep alive memory. If the battery positive voltage circuit loses power, all HVAC DTCs and settings will be erased from keep alive memory. The body control module (BCM), which is the vehicle mode master, provides a device ON-Signal. The HVAC control module provides blower, air delivery mode and air temperature settings.

The HVAC control module supports the following features:

| Feature | Availability |
|---|---|
| Afterblow | Available if reprogrammed by the technician |
| Purge | Yes |
| Personalization | Yes |
| Actuator Calibration | Yes |

### Actuators

Doors in the HVAC case assembly are used to control air flow. The HVAC control module operates the doors through the use of actuators, with one actuator being used for each door. The system has the following air control doors and associated actuators: mode, temperature, right temperature (CJ2), and recirculation.

Each actuator used in the system is a 5-wire stepper motor. The HVAC control module supplies a 12 V reference voltage to the stepper motor and energizes the 4 stepper motor coils with a pulsed ground signal. The stepper motor moves the associated air control door into the calculated position in order to reach the selected position. The null point of the stepper motor will be calibrated, if the stepper motor is new. When the stepper motor is calibrated, the HVAC control module can drive the applicable coil to reach exactly the desired position of the air control door.

### Blower Motor Assembly

The blower motor speed control signal from the HVAC Control Module, battery positive and ground circuits enable the blower motor to operate. The blower motor control circuitry is integrated within the blower motor assembly. The HVAC control module provides a low side pulse width modulation (PWM) signal to the blower motor to request a specific motor speed. The blower motor translates the PWM signal and drives the motor accordingly.

The blower motor has a signal wire used to output a speed signal. The signal is monitored by the BCM, and the value is sent to the ECM via serial data. The ECM monitors the blower motor speed to modify the total commanded engine coolant flow rate, which is a percentage of available coolant flow sent to the heater core for occupant comfort and windshield defrosting. When the HVAC Blower Speed is determined to be zero, the ECM disables the heater core coolant flow to optimize engine coolant flow for fuel economy and emissions.

### Evaporator Temperature Sensor

The evaporator temperature sensor is a 2-wire negative temperature co-efficient thermistor. The sensor operates within a temperature range of −40 to +85°C (−40 to +185°F). The sensor is installed at the evaporator and measures its temperature. If the temperature drops under 3°C (38°F), the compressor will be switched off in order to prevent evaporator icing.

### A/C Refrigerant Pressure Sensor

The A/C refrigerant pressure sensor is a 3-wire piezoelectric pressure transducer. A 5 V reference voltage, low reference, and signal circuits enable the sensor to operate. The A/C pressure signal can be between 0.2–4.8 V. When the A/C refrigerant pressure is low, the signal value is near 0 V. When the A/C refrigerant pressure is high, the signal value is near 5 V. The engine control module (ECM) converts the voltage signal to a pressure value. When pressure is too high or too low, the ECM will not allow the A/C compressor clutch to engage.

### A/C Compressor

The A/C compressor uses a conventional belt driven magnetic clutch to engage and mechanically turn the compressor. When the A/C switch is pressed, the HVAC control module sends an A/C request message to the ECM via serial data. If specific criteria is met, the ECM then grounds the A/C compressor clutch relay control circuit, which will switch the A/C compressor clutch relay. With the relay contacts closed, battery voltage is supplied to the permanently grounded A/C compressor clutch. The A/C compressor clutch will then be activated.

This A/C system utilizes a variable displacement solenoid valve to alter the amount of displacement created by the turning of the compressor. The HVAC control module provides both battery voltage and a pulse width modulated ground to the variable displacement solenoid valve. When the A/C switch is pressed, the HVAC control module grounds the variable displacement solenoid using a (PWM) signal in order to determine the amount of compressor displacement. The performance of the A/C compressor is regulated based on cooling load.

### Ambient Light/Sunload Sensor

The sunload sensor is connected to ground and to a 12 V clocked power supply through the HVAC control module. This clocked power supply is to power the sensor electronics and to work as a clock generator to the sunload sensor micro controller. The sensor uses a pulse signal for data identification and transferring the sun intensity measurement. At each positive transition from the clocked supply input, the sunload sensor micro controller will shift channels enabling new intensity measurement on the signal output to the HVAC control module. The signal voltage varies between 0–4 V.

The passenger compartment temperature sensor is a negative temperature co-efficient thermistor. A signal and low reference circuit enables the sensor to operate. As the air temperature increases, the sensor resistance decreases. The sensor signal varies between 0–5 V.

Bright or high intensity light causes the vehicles interior temperature to increase. The HVAC system compensates for the increased temperature by diverting additional cool air into the vehicle.

### Windshield Temperature and Inside Moisture Sensor

The windshield temperature and inside moisture sensor includes the relative humidity sensor, windshield temperature sensor and humidity sensing element temperature sensor all in one assembly.

This sensor assembly provides information about:

- Relative humidity level at the windshield inside the vehicle
- Temperature of the windshield inside the vehicle
- Temperature of the humidity sensor element

## Air Speed

The blower control switch is part of the HVAC controls. The selected value of the blower switch position is sent to the HVAC control module via LIN-Bus. The blower motor control circuitry is integrated within the blower motor assembly. The HVAC control module provides a low side pulse width modulation (PWM) signal to the blower motor to request a specific motor speed. The blower motor translates the PWM signal and drives the motor accordingly.

### Afterblow

Afterblow is a feature that dries the evaporator core by operating the blower motor after the engine is turned OFF. This reduces the amount of microbial growth that can create undesirable odors. The vehicle does not come equipped with the afterblow feature turned ON. If the afterblow feature is required due to an odor concern, it must be enabled using the scan tool Afterblow configuration function.

After the HVAC control module has been programmed for afterblow, the following conditions must be met for afterblow to operate:

- The engine has been turned OFF for at least 30 minutes.
- The ambient air temperature is at least 21°C (70°F).
- The A/C compressor operated for more than 2 minutes before shut down.
- The system voltage is at least 12 volts.

Once the above conditions have been met, the blower motor will perform the following sequence up to 5 times. This could last up to an hour:

1. The blower motor will be OFF for 7–11 minutes.
2. The blower motor will RUN for 25–30 seconds.

## Air Delivery

The HVAC control module controls the distribution of air by the use of recirculation and mode door actuator. The modes that may be selected are:

- Defrost
- Defog
- Panel
- Floor

The desired air distribution mode can be selected with the air distribution switches at the HVAC control. The HVAC control delivers the values to the HVAC control module via LIN-Bus. The HVAC control module controls the mode door actuator so that it drives the door to the calculated position. Depending on the position of the door, air is distributed through various ducts leading to the outlets in the dash. Turning the mode door to the defrost position, the HVAC control module will move the recirculation actuator to outside air, reducing window fogging. When defrost is selected, the blower motor will be activated, regardless of the coolant temperature. The HVAC control module enables a high volume of air delivered to the front defrost vents. A/C is available in all modes.

The rear window defogger does not affect the HVAC system.

## Heating and A/C Operation

The purpose of the heating and A/C system is to provide heated and cooled air to the interior of the vehicle. The A/C system will also remove humidity from the interior and reduce windshield fogging. Regardless of the temperature setting, the following can affect the rate that the HVAC system can achieve the desired temperature:

- Recirculation actuator setting
- Difference between inside and desired temperature
- Blower motor speed setting
- Mode setting

When the A/C switch is pressed, the HVAC controls sends a signal to the HVAC control module via LIN-Bus. The HVAC control module evaluates this signal and sends an A/C request signal to the ECM via CAN-Bus. The ECM checks all preconditions before releasing and if all conditions are met sends a release signal back to the HVAC control module. The ECM will provide a ground for the A/C compressor relay enabling it to close its internal contacts to send battery voltage to the A/C compressor clutch coil. The A/C compressor clutch will be activated. The performance of the A/C compressor is regulated via a variable A/C compressor solenoid valve. The HVAC control module supplies battery voltage to the A/C compressor. When the A/C switch is pressed, the HVAC control module provides a pulse width modulation (PWM) signal to the A/C compressor solenoid valve in order to command the performance of the A/C compressor.

The following conditions must be met in order to activate the A/C compressor:

- Battery voltage is between 9–18 V
- Engine coolant temperature is less than 124°C (255°F)
- Engine speed is greater than 600 RPM
- Engine speed is less than 5 500 RPM
- A/C high side pressure is between 269–2 929 kPa (39–425 PSI)
- Throttle position is less than 100%
- Evaporator temperature is greater than 3°C (38°F)
- ECM does not detect immoderate torque load
- ECM does not detect insufficient idle quality
- The ambient temperature is above 1°C (34°F)

The sensor information is used by the ECM to determine the following:

- The A/C high side pressure
- An A/C system load on the engine
- An immoderate A/C high side pressure
- The heat load at the A/C condenser

The air streams into the passenger compartment through the heater core and the evaporator core. The air temperature actuator drives the mixed air door to direct the airflow. If the interior temperature should be increased, the mixed air door is put into the position in which more air streams through the heater core. If the interior temperature should be decreased, the mixed air door is put into the position in which more air streams through the evaporator core.

## Recirculation Operation

The recirculation switch is integrated into the HVAC control. The selected recirculation setting is sent to the HVAC control module via LIN-Bus. The HVAC control module controls the air intake using the recirculation actuator. In recirculation mode the recirculation door is positioned to block outside air from entering and circulate the air within the vehicle. In outside air mode the recirculation door is positioned to route outside air into the vehicle.

Recirculation is only available if the defrost mode is not active. When the defrost mode is active, the recirculation actuator positions the recirculation door so that outside air is circulated to the windshield to reduce fogging.

In automatic mode the values of the sensors are used as inputs for the HVAC control module to calculate the fog risk on passenger compartment side of the windshield. The A/C compressor and the defrost mode may activated to prevent or remove fog on the passenger compartment side of the windshield.

## Automatic Operation

In automatic operation, the HVAC control module maintains the comfort level inside of the vehicle by controlling the A/C compressor clutch, the blower motor, the air temperature actuators, mode actuator and recirculation actuator.

To put the HVAC system in automatic mode, the following is required:

1. The auto switch must be activated.
2. The air temperature switch must not be in either the full hot or full cold position.

Once the desired temperature is reached, the blower motor, mode, recirculation and temperature actuators automatically adjust to maintain the temperature selected. The HVAC control module performs the following functions to maintain the desired air temperature:

- Monitors the following sensors:
  - – Ambient air temperature sensor
  - – Ambient light/sunload sensor
  - – Windshield temperature and inside moisture sensor
- Regulate the blower motor speed
- Position the air temperature actuators
- Position the mode door actuator
- Position the recirculation actuator
- Request A/C operation
- Control of the A/C compressor

When the warmest position is selected in automatic operation the blower speed will increase gradually until the vehicle reaches normal operating temperature. When normal operating temperature is reached the blower stays on high speed and the air temperature actuators stays in the full heat position.

When the coldest position is selected in automatic operation the blower stays on high and the air temperature actuators stay in full cold position. The mode actuator remains in the panel position and the recirculation actuator will remain in the recirculation position.

Under cold ambient temperatures, the automatic HVAC system provides heat in the most efficient manner. The operator can select an extreme temperature setting but the system will not warm the vehicle any faster. Under warm ambient temperatures, the automatic HVAC system also provides air conditioning in the most efficient manner. Selecting an extreme cool temperature will not cool the vehicle any faster.

## Electric Auxiliary Heater (C32)

Some models are equipped with an auxiliary electric heater to assist in warming the passenger compartment when the engine coolant has not sufficiently warmed to operating temperature. The heater is a 12 V positive temperature coefficient heating element located in the HVAC case just downstream of the traditional heater core. The HVAC control module will activate it when the outside temperature is less than approximately 8°C (46°F), the engine coolant temperature is less than approximately 75°C (167°F), and the temperature blend door is commanded to the full hot position.

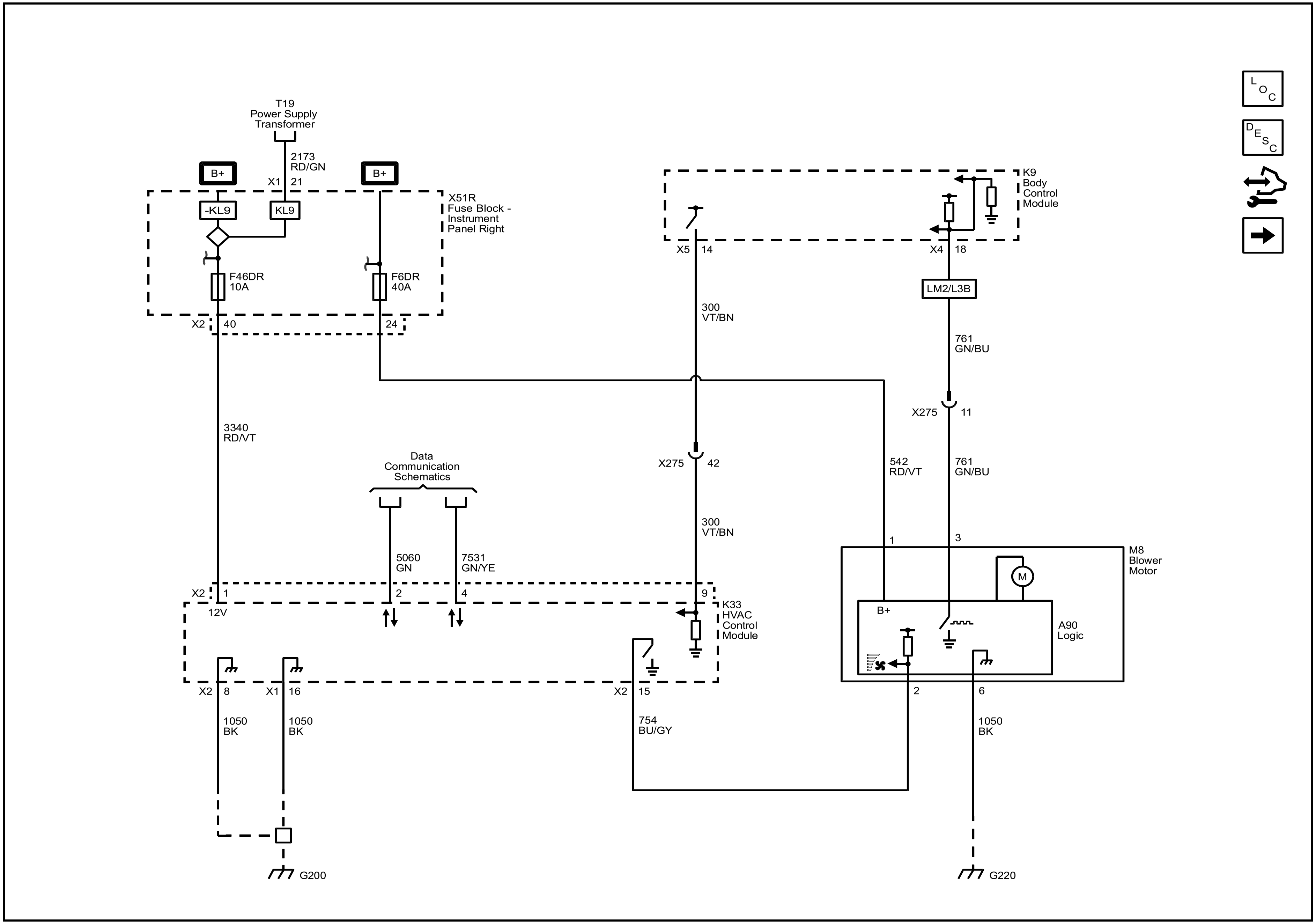
## Engine Coolant and A/C System Refrigerant

For information on engine coolant, coolant flow, A/C refrigerant, and the A/C refrigerant cycle, refer to Heating and Air Conditioning System Description and Operation.

# HVAC - Manual

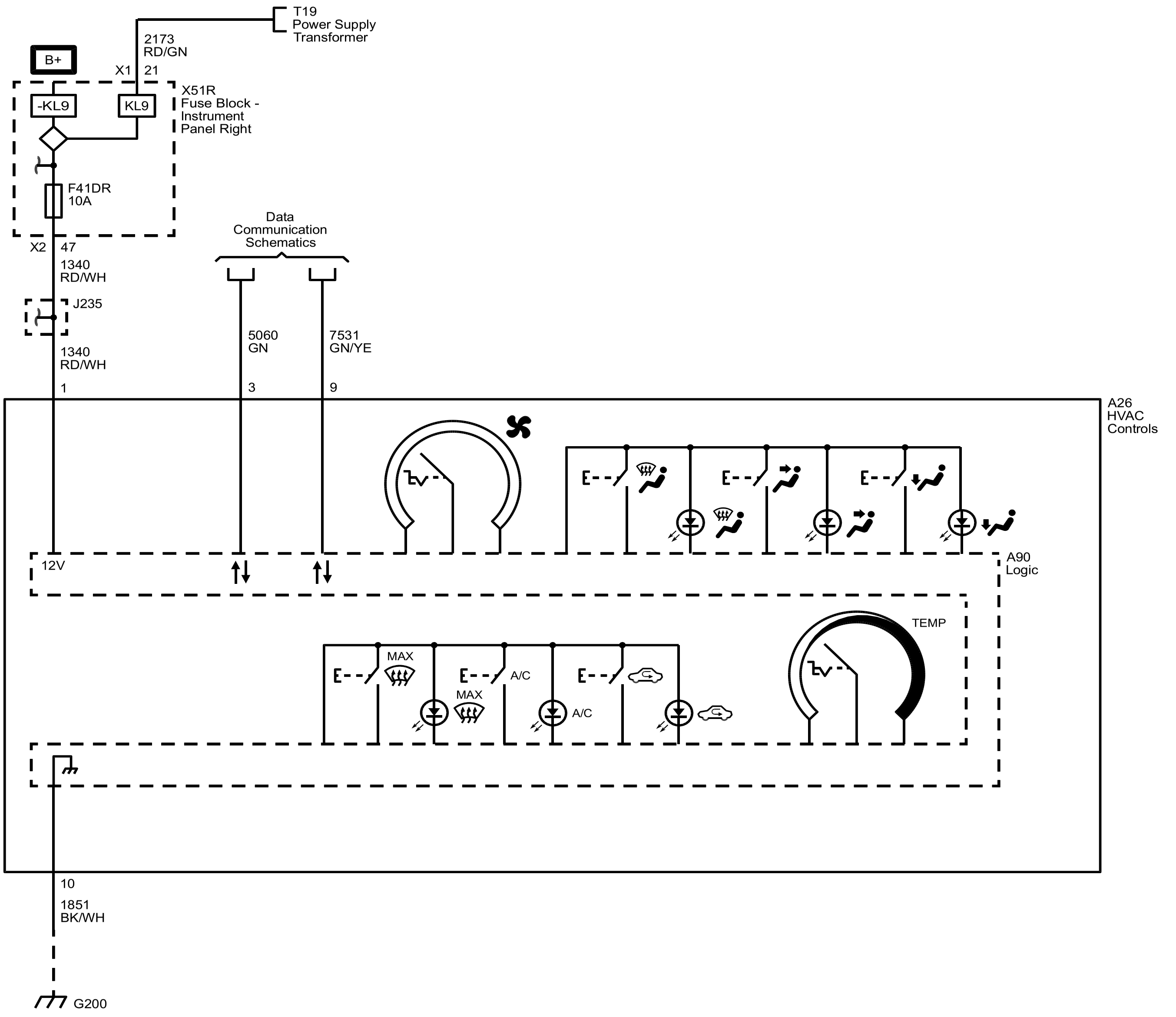
## Schematic and Routing Diagrams

## HVAC Schematics (C4P/C67) (HVAC Module Power, Ground, Serial Data, and Blower Motor)


LOC
DESC
T19
Power Supply
Transformer
2173
RD/GN
X1 21
B+
B+
-KL9
KL9
X51R
Fuse Block -
Instrument
Panel Right
F46DR
10A
F6DR
40A
X2 40
24
3340
RD/VT
Data
Communication
Schematics
5060
GN
7531
GN/YE
X2 1
12V
2
4
9
K33
HVAC
Control
Module
X2 8
X1 16
X2 15
1050
BK
1050
BK
754
BU/GY
G200
K9
Body
Control
Module
X5 14
X4 18
LM2/L3B
300
VT/BN
761
GN/BU
X275 11
X275 42
542
RD/VT
761
GN/BU
300
VT/BN
1
3
M8
Blower
Motor
M
B+
A90
Logic
2
6
1050
BK
G220

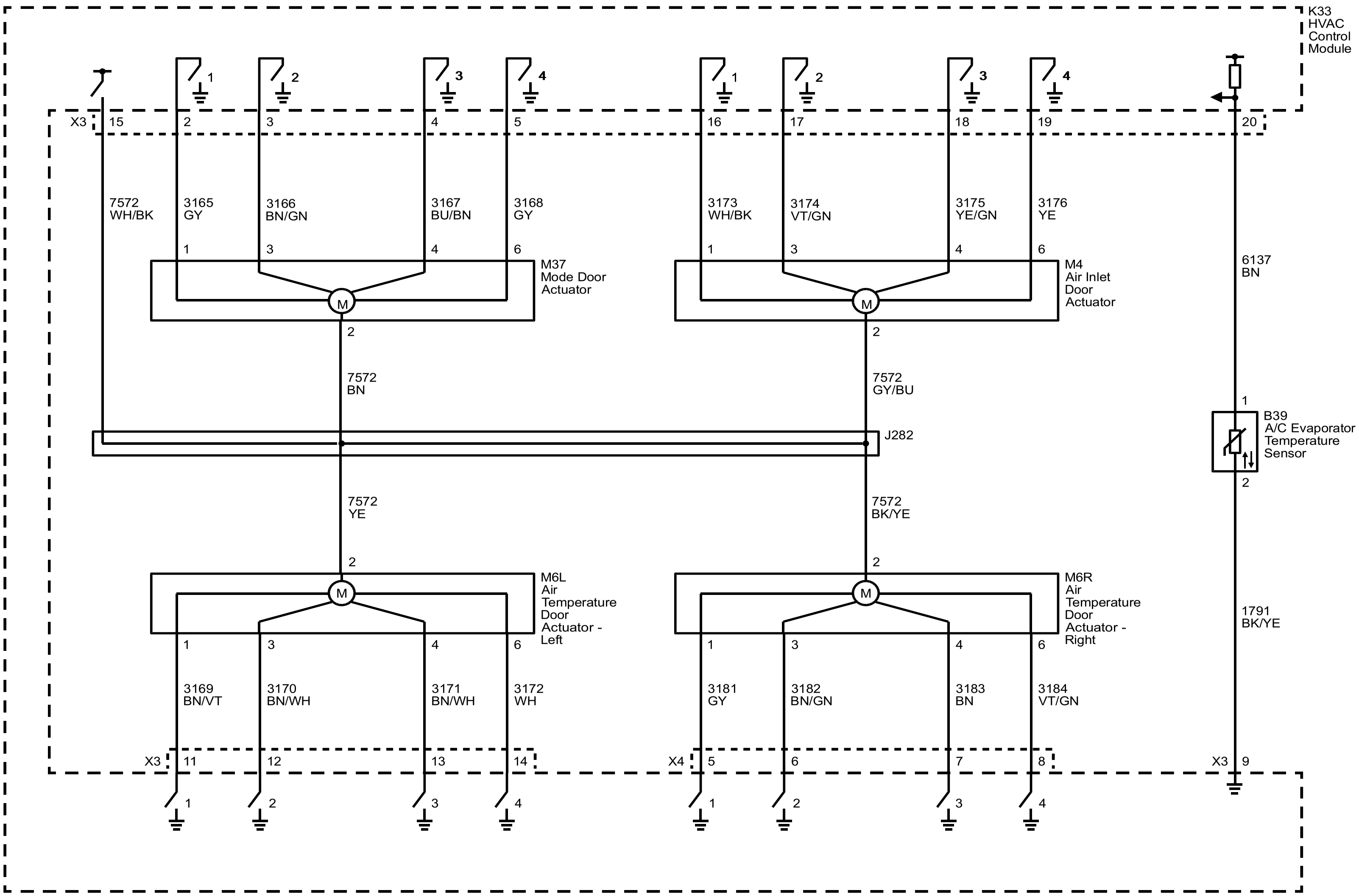
5085586

## HVAC Schematics (C4P/C67) (HVAC Controls)


T19
Power Supply
Transformer
2173
RD/GN
B+
X1
21
-KL9
KL9
X51R
Fuse Block -
Instrument
Panel Right
F41DR
10A
X2
47
1340
RD/WH
J235
1340
RD/WH
1
Data
Communication
Schematics
5060
GN
3
7531
GN/YE
9
A26
HVAC
Controls
12V
A90
Logic
MAX
A/C
MAX
A/C
TEMP
10
1851
BK/WH
G200

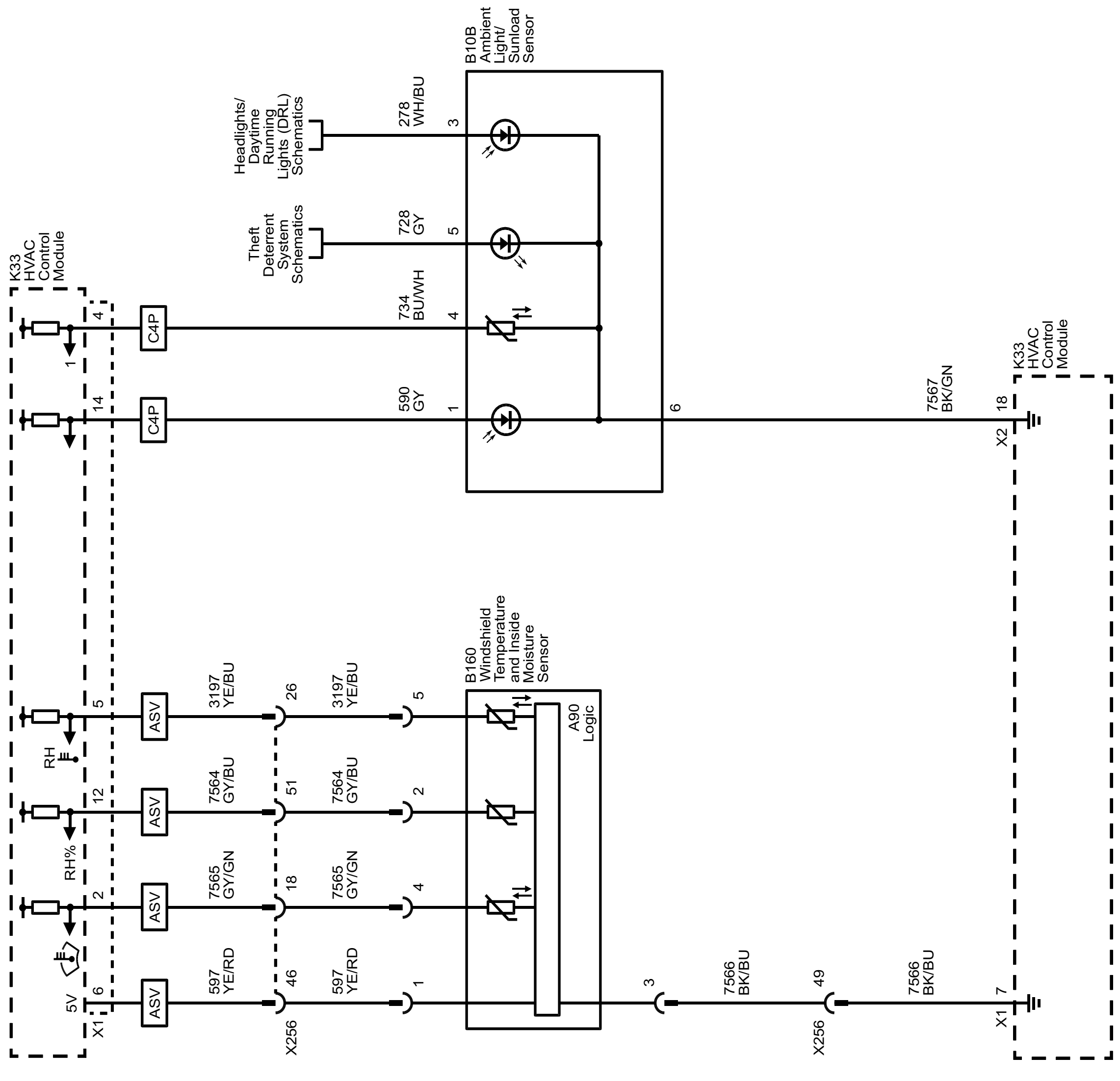
5085587

## HVAC Schematics (C4P/C67) (Temperature and Mode)

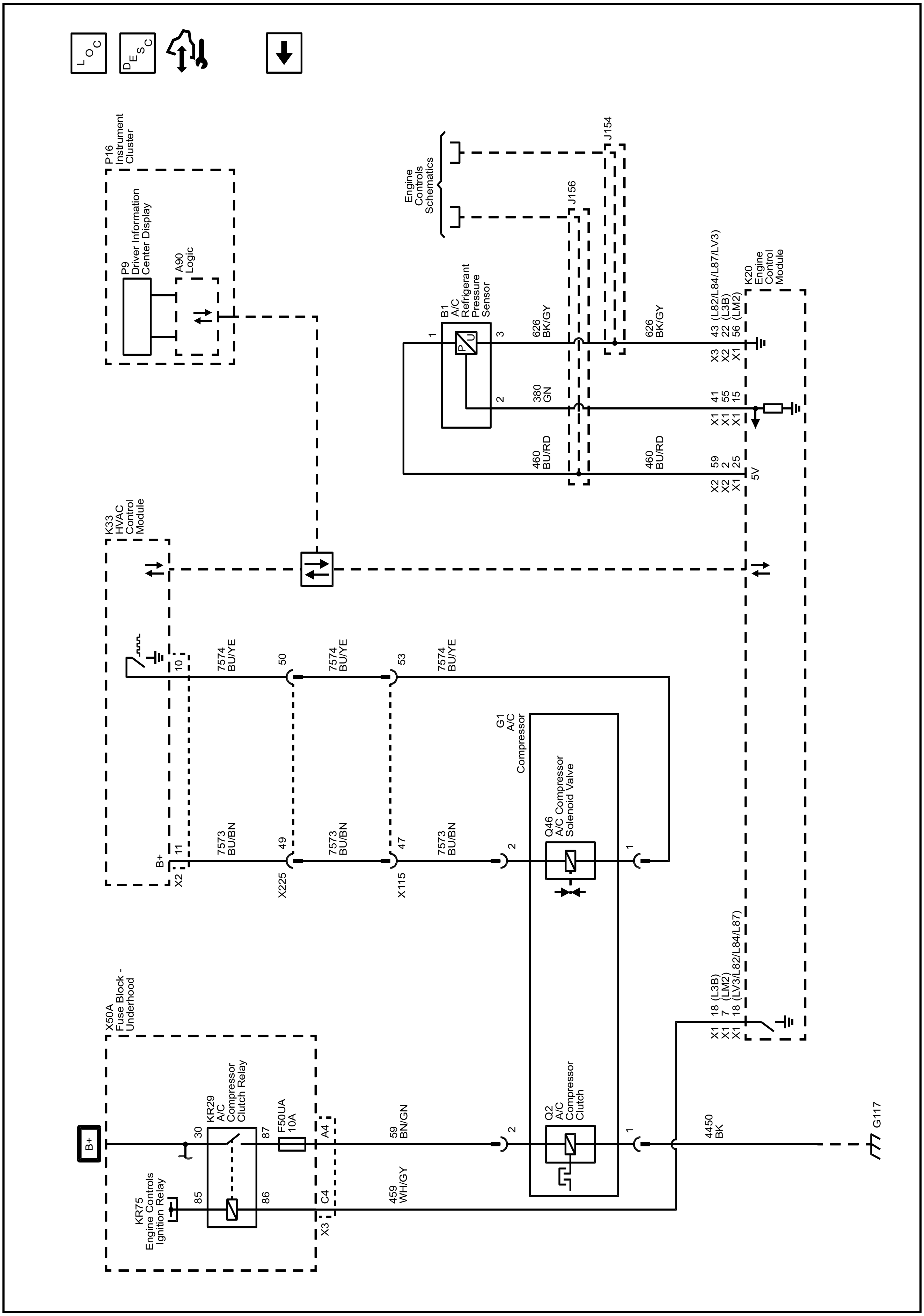

K33
HVAC
Control
Module
X3
15
2
3
4
5
16
17
18
19
20
1
2
3
4
1
2
3
4
7572
WH/BK
3165
GY
3166
BN/GN
3167
BU/BN
3168
GY
3173
WH/BK
3174
VT/GN
3175
YE/GN
3176
YE
6137
BN
M37
Mode Door
Actuator
M4
Air Inlet
Door
Actuator
M
2
7572
BN
7572
GY/BU
J282
B39
A/C Evaporator
Temperature
Sensor
7572
YE
7572
BK/YE
M6L
Air
Temperature
Door
Actuator -
Left
M6R
Air
Temperature
Door
Actuator -
Right
1791
BK/YE
3169
BN/VT
3170
BN/WH
3171
BN/WH
3172
WH
3181
GY
3182
BN/GN
3183
BN
3184
VT/GN
X3
11
12
13
14
X4
5
6
7
8
X3
9

5085588

# HVAC Schematics (C4P/C67) (Windshield and Sunload Sensors (ASV/C4P))


K33 HVAC Control Module
X1
5V
6
2
12
5
RH%
RH
14
4
1
C4P
ASV
597 YE/RD
7565 GY/GN
7564 GY/BU
3197 YE/BU
X256
46
18
51
26
1
4
2
5
B160 Windshield Temperature and Inside Moisture Sensor
A90 Logic
3
7566 BK/BU
49
7
590 GY
734 BU/WH
728 GY
278 WH/BU
Theft Deterrent System Schematics
Headlights/ Daytime Running Lights (DRL) Schematics
B10B Ambient Light/ Sunload Sensor
6
7567 BK/GN
X2
18
5086893

## HVAC Schematics (C4P/C67) (A/C Compressor Controls)


LOC
DESC
X50A Fuse Block - Underhood
B+
30
KR29 A/C Compressor Clutch Relay
87
85
86
KR75 Engine Controls Ignition Relay
F50UA 10A
A4
C4
X3
59 BN/GN
459 WH/GY
2
Q2 A/C Compressor Clutch
1
4450 BK
G117
X1 18 (L3B)
X1 7 (LM2)
X1 18 (LV3/L82/L84/L87)
K33 HVAC Control Module
B+
X2
11
10
7573 BU/BN
7574 BU/YE
49
50
X225
47
53
X115
2
Q46 A/C Compressor Solenoid Valve
1
G1 A/C Compressor
P16 Instrument Cluster
P9 Driver Information Center Display
A90 Logic
B1 A/C Refrigerant Pressure Sensor
1
2
3
P
U
460 BU/RD
380 GN
626 BK/GY
J156
J154
Engine Controls Schematics
X2 59
X2 2
X1 25
5V
X1 41
X1 55
X1 15
X3 43 (L82/L84/L87/LV3)
X2 22 (L3B)
X1 56 (LM2)
K20 Engine Control Module

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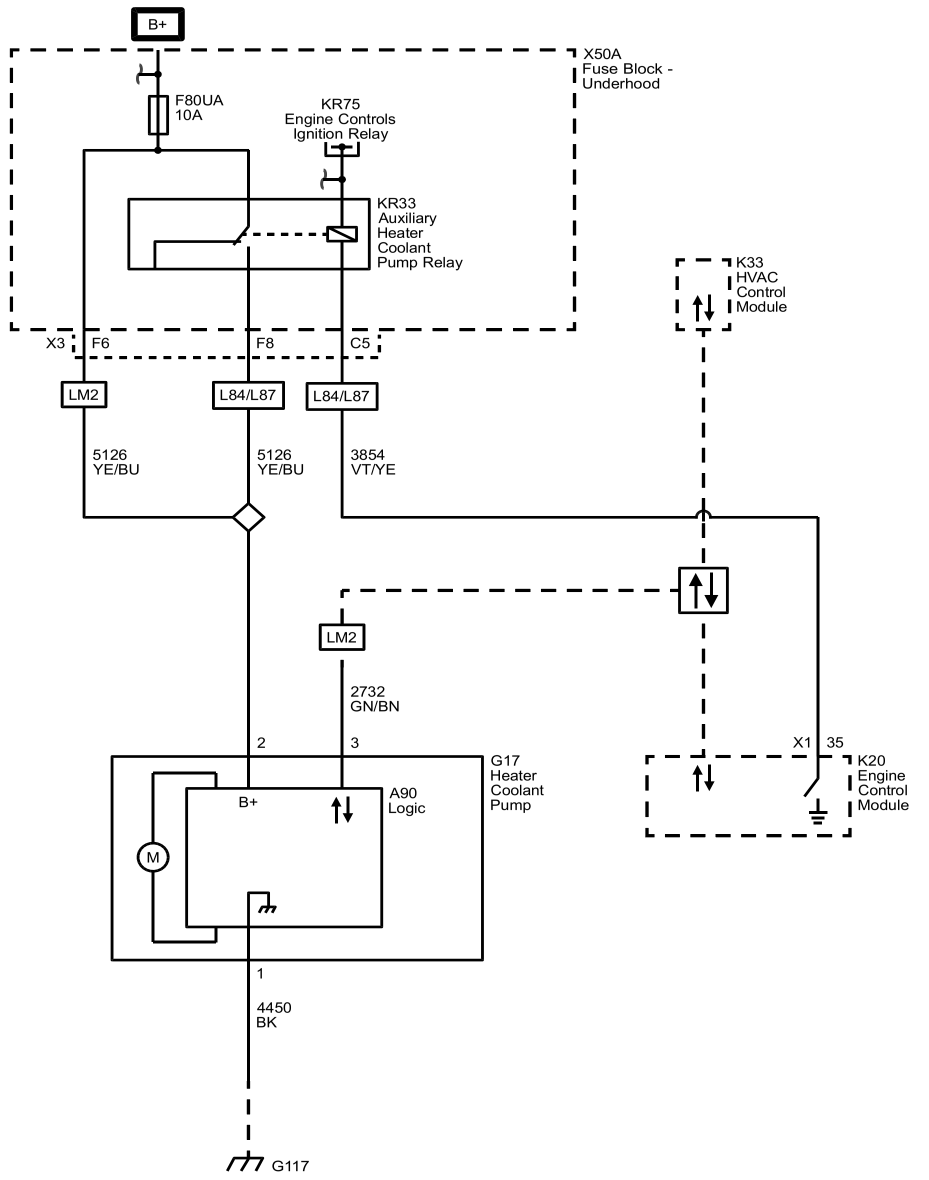
## HVAC Schematics (C4P/C67) (Heater Coolant Pump (KL9))


B+
X50A
Fuse Block -
Underhood
F80UA
10A
KR75
Engine Controls
Ignition Relay
KR33
Auxiliary
Heater
Coolant
Pump Relay
X3
F6
F8
C5
LM2
L84/L87
L84/L87
5126
YE/BU
5126
YE/BU
3854
VT/YE
K33
HVAC
Control
Module
LM2
2732
GN/BN
2
3
G17
Heater
Coolant
Pump
B+
A90
Logic
M
1
4450
BK
G117
X1
35
K20
Engine
Control
Module

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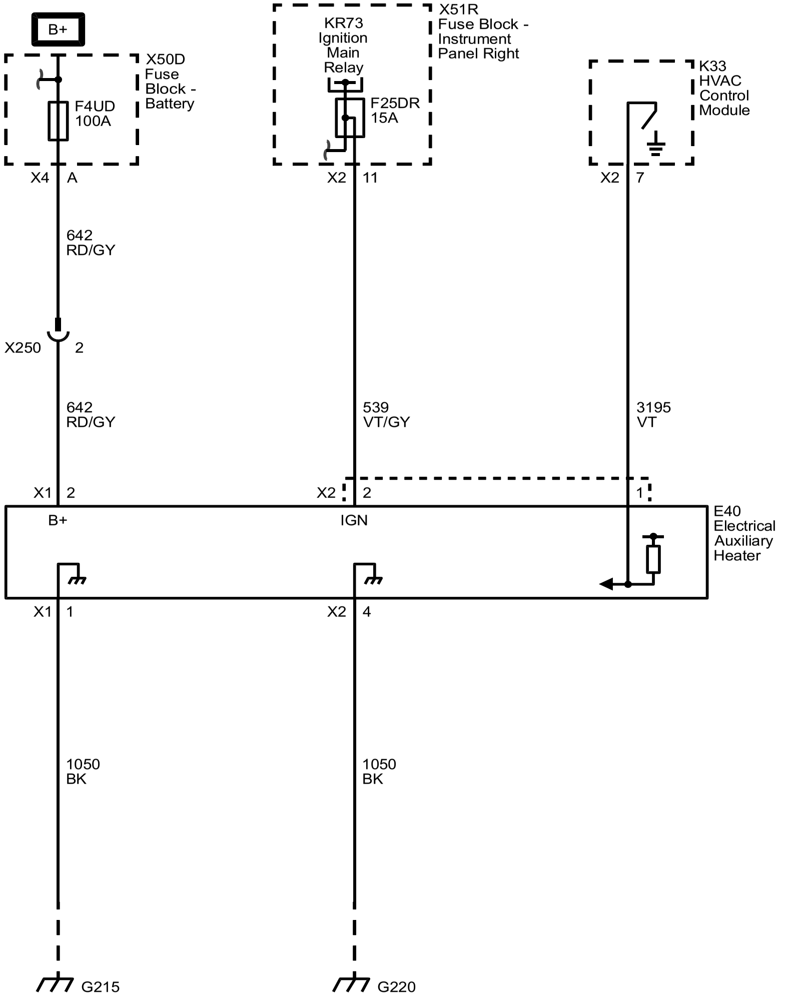
## HVAC Schematics (C4P/C67) (Auxiliary Heater (C32))


B+
X50D
Fuse
Block -
Battery
F4UD
100A
X4
A
642
RD/GY
X250
2
642
RD/GY
X1
2
B+
KR73
Ignition
Main
Relay
X51R
Fuse Block -
Instrument
Panel Right
F25DR
15A
X2
11
539
VT/GY
X2
2
IGN
K33
HVAC
Control
Module
X2
7
3195
VT
1
E40
Electrical
Auxiliary
Heater
X1
1
1050
BK
G215
X2
4
1050
BK
G220

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# Description and Operation

## Manual HVAC Description and Operation

The air temperature and the air delivery description and operation are divided into seven areas:

- HVAC Control Components
- Air Speed
- Air Delivery
- Heating and A/C Operation
- Recirculation Operation
- Engine Coolant and A/C System Refrigerant

## HVAC Control Components

### HVAC Controls

The HVAC controls contains all switches, buttons, and dials which are required to control the functions of the HVAC system and serve as interface between the operator and the HVAC control module. The selected values are passed to the HVAC control module via LIN-Bus.

### HVAC Control Module

The HVAC control module is a GMLAN device that interfaces between the operator and the HVAC system to maintain and control desired air temperature and air distribution settings. The battery positive voltage circuit provides power that the HVAC control module uses for keep alive memory. If the battery positive voltage circuit loses power, all HVAC DTCs and settings will be erased from keep alive memory. The body control module (BCM), which is the vehicle mode master, provides a device ON-Signal. The HVAC control module provides blower, air delivery mode and air temperature settings.

The HVAC control module supports the following features:

| Feature | Availability |
|---|---|
| Afterblow | Yes |
| Personalization | Yes |
| Actuator Calibration | Yes |

### Actuators

Doors in the HVAC case assembly are used to control air flow. The HVAC control module operates the doors through the use of actuators, with one actuator being used for each door. The system has the following air control doors and associated actuators: mode, temperature, and recirculation.

Each actuator used in the system is a 5-wire stepper motor. The HVAC control module supplies a 12 V reference voltage to the stepper motor and energizes the 4 stepper motor coils with a pulsed ground signal. The stepper motor moves the associated air control door into the calculated position in order to reach the selected position. The null point of the stepper motor will be calibrated, if the stepper motor is new. When the stepper motor is calibrated, the HVAC control module can drive the applicable coil to reach exactly the desired position of the air control door.

### Blower Motor Assembly

The blower motor speed control signal from the HVAC Control Module, battery positive and ground circuits enable the blower motor to operate. The blower motor control circuitry is integrated within the blower motor assembly. The HVAC control module provides a low side pulse width modulation (PWM) signal to the blower motor to request a specific motor speed. The blower motor translates the PWM signal and drives the motor accordingly.

The blower motor has a signal wire used to output a speed signal. The signal is monitored by the BCM, and the value is sent to the ECM via serial data. The ECM monitors the blower motor speed to modify the total commanded engine coolant flow rate, which is a percentage of available coolant flow sent to the heater core for occupant comfort and windshield defrosting. When the HVAC Blower Speed is determined to be zero, the ECM disables the heater core coolant flow to optimize engine coolant flow for fuel economy and emissions.

### Evaporator Temperature Sensor

The evaporator temperature sensor is a 2-wire negative temperature co-efficient thermistor. The sensor operates within a temperature range of −40 to +85°C (−40 to +185°F). The sensor is installed at the evaporator and measures its temperature. If the temperature drops under 3°C (38°F), the compressor will be switched off in order to prevent evaporator icing.

### A/C Refrigerant Pressure Sensor

The A/C refrigerant pressure sensor is a 3-wire piezoelectric pressure transducer. A 5 V reference voltage, low reference, and signal circuits enable the sensor to operate. The A/C pressure signal can be between 0.2–4.8 V. When the A/C refrigerant pressure is low, the signal value is near 0 V. When the A/C refrigerant pressure is high, the signal value is near 5 V. The engine control module (ECM) converts the voltage signal to a pressure value. When pressure is too high or too low, the ECM will not allow the A/C compressor clutch to engage.

### A/C Compressor

The A/C compressor uses a conventional belt driven magnetic clutch to engage and mechanically turn the compressor. When the A/C switch is pressed, the HVAC control module sends an A/C request message to the ECM via serial data. If specific criteria is met, the ECM then grounds the A/C compressor clutch relay control circuit, which will switch the A/C compressor clutch relay. With the relay contacts closed, battery voltage is supplied to the permanently grounded A/C compressor clutch. The A/C compressor clutch will then be activated.

This A/C system utilizes a variable displacement solenoid valve to alter the amount of displacement created by the turning of the compressor. The HVAC control module provides both battery voltage and a pulse width modulated ground to the variable displacement solenoid valve. When the A/C switch is pressed, the HVAC control module grounds the variable displacement solenoid using a (PWM) signal in order to determine the amount of compressor displacement. The performance of the A/C compressor is regulated based on cooling load.

## Air Speed

The blower control switch is part of the HVAC controls. The selected value of the blower switch position is sent to the HVAC control module via LIN-Bus. The blower motor control circuitry is integrated within the blower motor assembly. The HVAC control module provides a low side pulse width modulation (PWM) signal to the blower motor to request a specific motor speed. The blower motor translates the PWM signal and drives the motor accordingly.

### Afterblow

Afterblow is a feature that dries the evaporator core by operating the blower motor after the engine is turned OFF. This reduces the amount of microbial growth that can create undesirable odors. The vehicle does not come equipped with the afterblow feature turned ON. If the afterblow feature is required due to an odor concern, it must be enabled using the scan tool Afterblow configuration function.

After the HVAC control module has been programmed for afterblow, the following conditions must be met for afterblow to operate:

- The engine has been turned OFF for at least 30 minutes.
- The ambient air temperature is at least 21°C (70°F).
- The A/C compressor operated for more than 2 minutes before shut down.
- The system voltage is at least 12 volts.

Once the above conditions have been met, the blower motor will perform the following sequence up to 5 times. This could last up to an hour:

1. The blower motor will be OFF for 7–11 minutes.
2. The blower motor will RUN for 25–30 seconds.

## Air Delivery

The HVAC control module controls the distribution of air by the use of recirculation and mode actuator. The modes that may be selected are:

- Defrost
- Defog
- Panel
- Floor

The desired air distribution mode can be selected with the air distribution switches at the HVAC controls. The HVAC controls delivers the values to the HVAC control module via LIN-Bus. The HVAC control module controls the air distribution actuator so that it drives the door to the calculated position. Depending on the position of the door, air is distributed through various ducts leading to the outlets in the dash. Turning the mode door to the defrost position, the HVAC control module will move the recirculation actuator to outside air, reducing window fogging. When defrost is selected, the blower motor will be activated, regardless of the coolant temperature. The HVAC control module enables a high volume of air delivered to the front defrost vents. A/C is available in all modes.

The rear window defogger does not affect the HVAC system.

## Heating and A/C Operation

The purpose of the heating and A/C system is to provide heated and cooled air to the interior of the vehicle. The A/C system will also remove humidity from the interior and reduce windshield fogging. Regardless of the temperature setting, the following can affect the rate that the HVAC system can achieve the desired temperature:

- Recirculation actuator setting
- Difference between inside and desired temperature
- Blower motor speed setting
- Mode setting

When the A/C switch is pressed, the HVAC controls sends a signal to the HVAC control module via LIN-Bus. The HVAC control module evaluates this signal and sends an A/C request signal to the ECM via CAN-Bus. The ECM checks all preconditions before releasing and if all conditions are met sends a release signal back to the HVAC control module. The ECM will provide a ground for the A/C compressor relay enabling it to close its internal contacts to send battery voltage to the A/C compressor clutch coil. The A/C compressor clutch will be activated. The performance of the A/C compressor is regulated via a variable A/C compressor solenoid valve. The HVAC control module supplies battery voltage to the A/C compressor. When the A/C switch is pressed, the HVAC control module provides a pulse width modulation (PWM) signal to the A/C compressor solenoid valve in order to command the performance of the A/C compressor.

The following conditions must be met in order to activate the A/C compressor:

- Battery voltage is between 9–18 V
- Engine coolant temperature is less than 124°C (255°F)
- Engine speed is greater than 600 RPM
- Engine speed is less than 5 500 RPM
- A/C high side pressure is between 269–2 929 kPa (39–425 PSI)
- Throttle position is less than 100%
- Evaporator temperature is greater than 3°C (38°F)
- ECM does not detect immoderate torque load
- ECM does not detect insufficient idle quality
- The ambient temperature is above 1°C (34°F)

The sensor information is used by the ECM to determine the following:

- The A/C high side pressure
- An A/C system load on the engine
- An immoderate A/C high side pressure
- The heat load at the A/C condenser

The air streams into the passenger compartment through the heater core and the evaporator core. The air temperature actuator drives the mixed air door to induce the airflow. If the interior temperature should be increased, the mixed air door is put into the position in which more air streams through the heater core. If the interior temperature should be decreased, the mixed air door is put into the position in which more air streams through the evaporator core.

## Recirculation Operation

The recirculation switch is integrated into the HVAC control. The selected recirculation setting is sent to the HVAC control module via LIN-Bus. The HVAC control module controls the air intake using the recirculation actuator. In recirculation mode the recirculation door is positioned to block outside air from entering and circulate the air within the vehicle. In outside air mode the recirculation door is positioned to route outside air into the vehicle.

Recirculation is only available if the defrost mode is not active. When the defrost mode is active, the recirculation actuator positions the recirculation door so that outside air is circulated to the windshield to reduce fogging.

## Electric Auxiliary Heater

Some models are equipped with an auxiliary electric heater to assist in warming the passenger compartment when the engine coolant has not sufficiently warmed to operating temperature. The heater is a 12 V positive temperature coefficient heating element located in the HVAC case just downstream of the traditional heater core. The HVAC control module will activate it when the outside temperature is less than approximately 8°C (46°F), the engine coolant temperature is less than approximately 75°C (167°F), and the temperature blend door is commanded to the full hot position.

## Engine Coolant and A/C System Refrigerant

For information on engine coolant, coolant flow, A/C refrigerant, and the A/C refrigerant cycle, refer to Heating and Air Conditioning System Description and Operation.

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# Section 6

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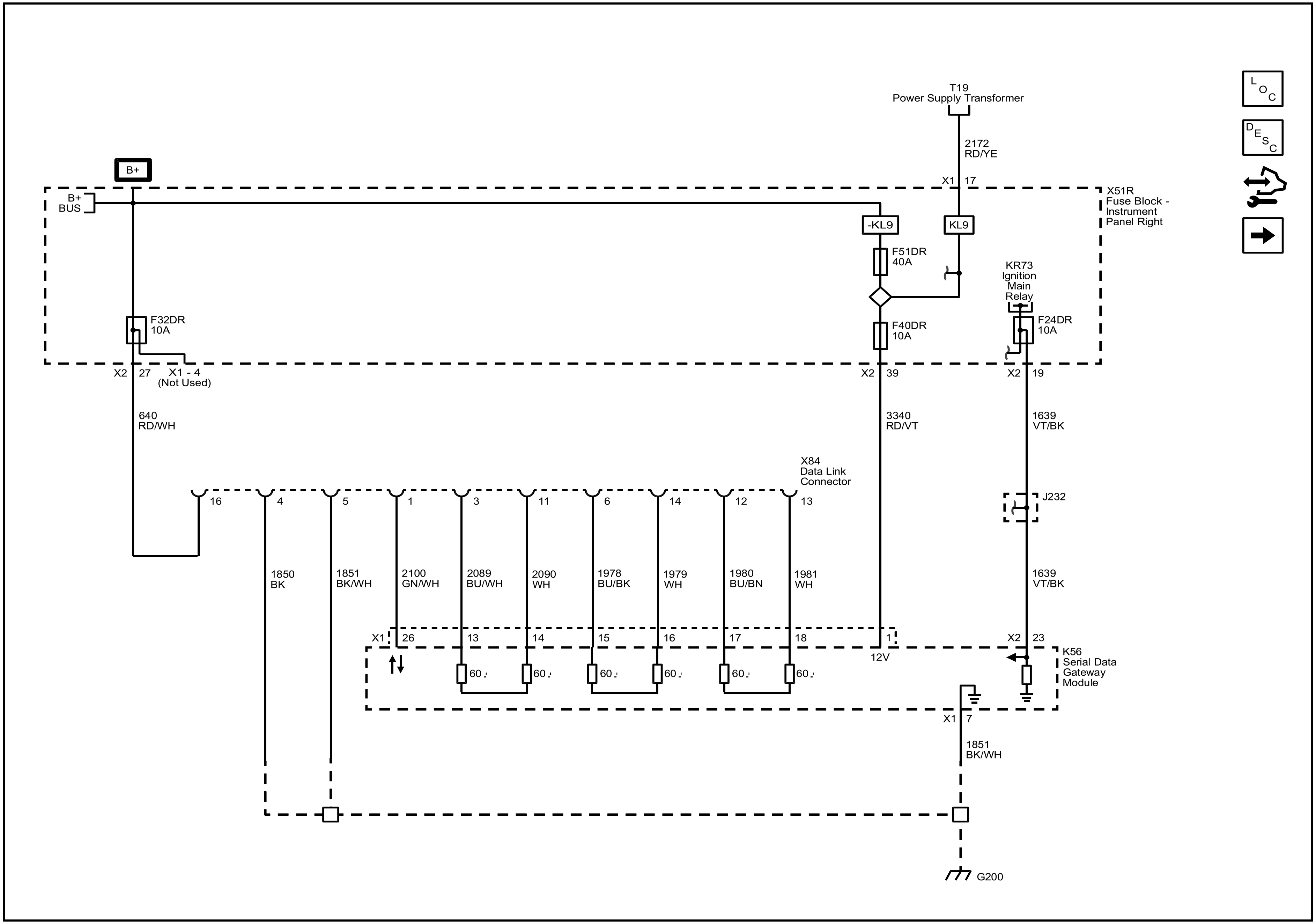
    Electrical Center Identification Views . . . . . . . . . . 6-188
    Component Connector End Views . . . . . . . . . . . . 6-254
    Inline Harness Connector End Views . . . . . . . . . . 6-894
  **Description and Operation** . . . . . . . . . . . . . . . . . . . 6-1038
    Power Mode Description and Operation . . . . . 6-1038
    Retained Accessory Power Description and Operation . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 6-1040

BLANK

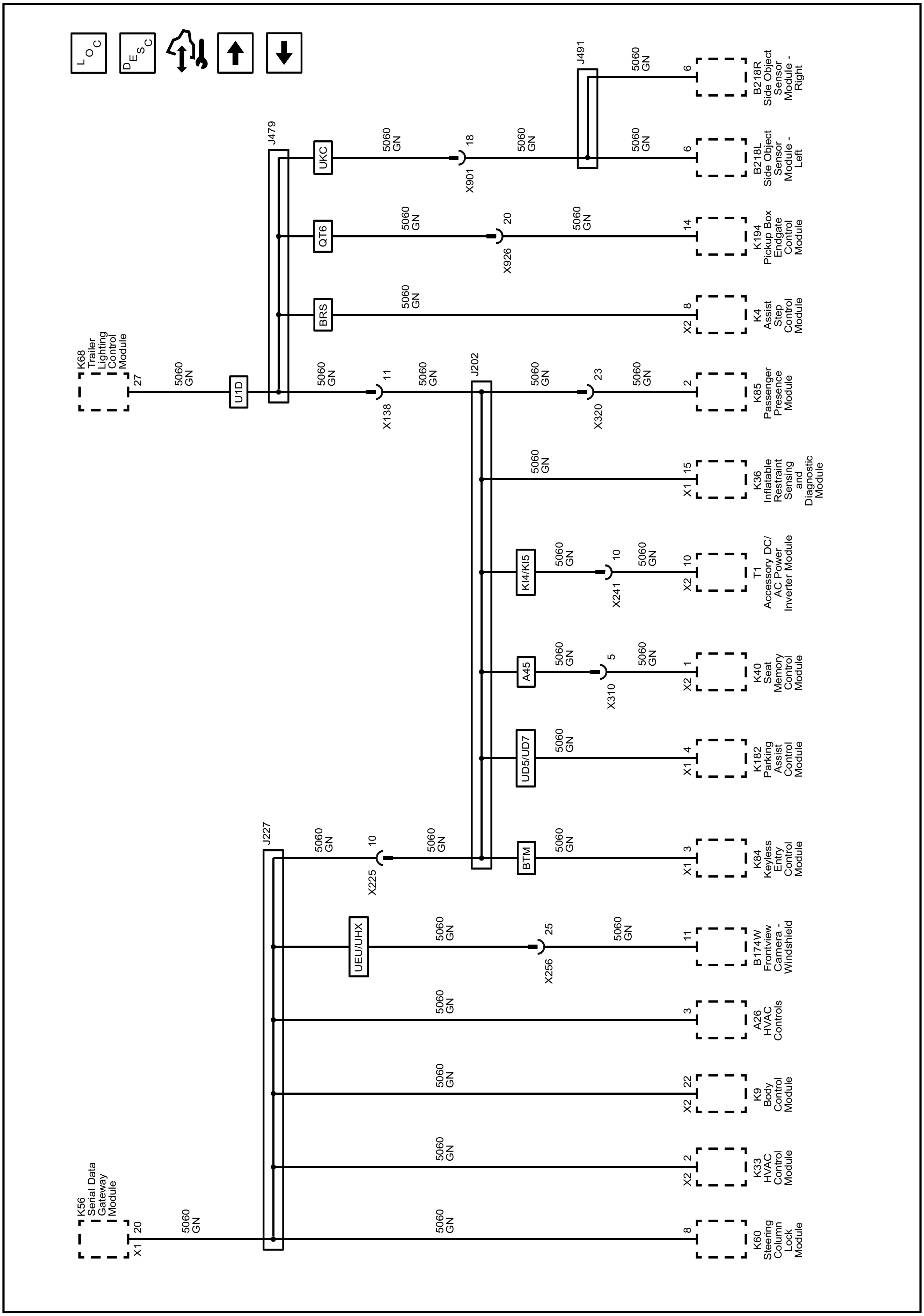
# Data Communications

## Schematic and Routing Diagrams

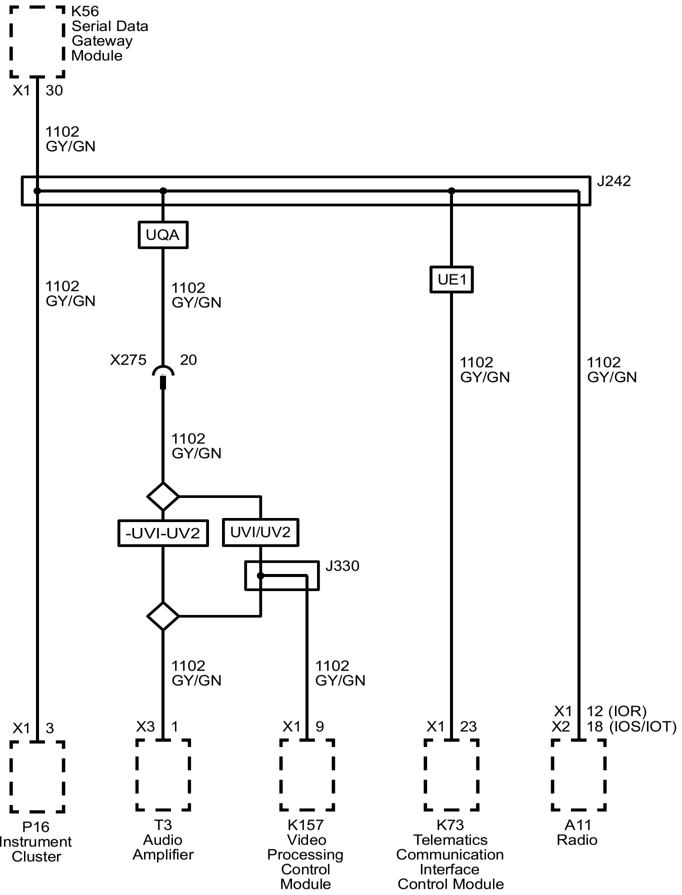
## Data Communication Schematics (Data Link Connector and Serial Data Gateway Module Power and Ground)


L O C
D E S C
T19
Power Supply Transformer
2172
RD/YE
X1 17
B+
B+
BUS
X51R
Fuse Block - Instrument Panel Right
-KL9
KL9
F51DR
40A
KR73
Ignition
Main
Relay
F32DR
10A
F40DR
10A
F24DR
10A
X2 27
X1 - 4
(Not Used)
X2 39
X2 19
640
RD/WH
3340
RD/VT
1639
VT/BK
X84
Data Link
Connector
J232
16
4
5
1
3
11
6
14
12
13
1850
BK
1851
BK/WH
2100
GN/WH
2089
BU/WH
2090
WH
1978
BU/BK
1979
WH
1980
BU/BN
1981
WH
1639
VT/BK
X1 26
13
14
15
16
17
18
1
12V
X2 23
K56
Serial Data
Gateway
Module
60 Ω
60 Ω
60 Ω
60 Ω
60 Ω
60 Ω
X1 7
1851
BK/WH
G200
4937699

## Data Communication Schematics (Low Speed GMLAN)

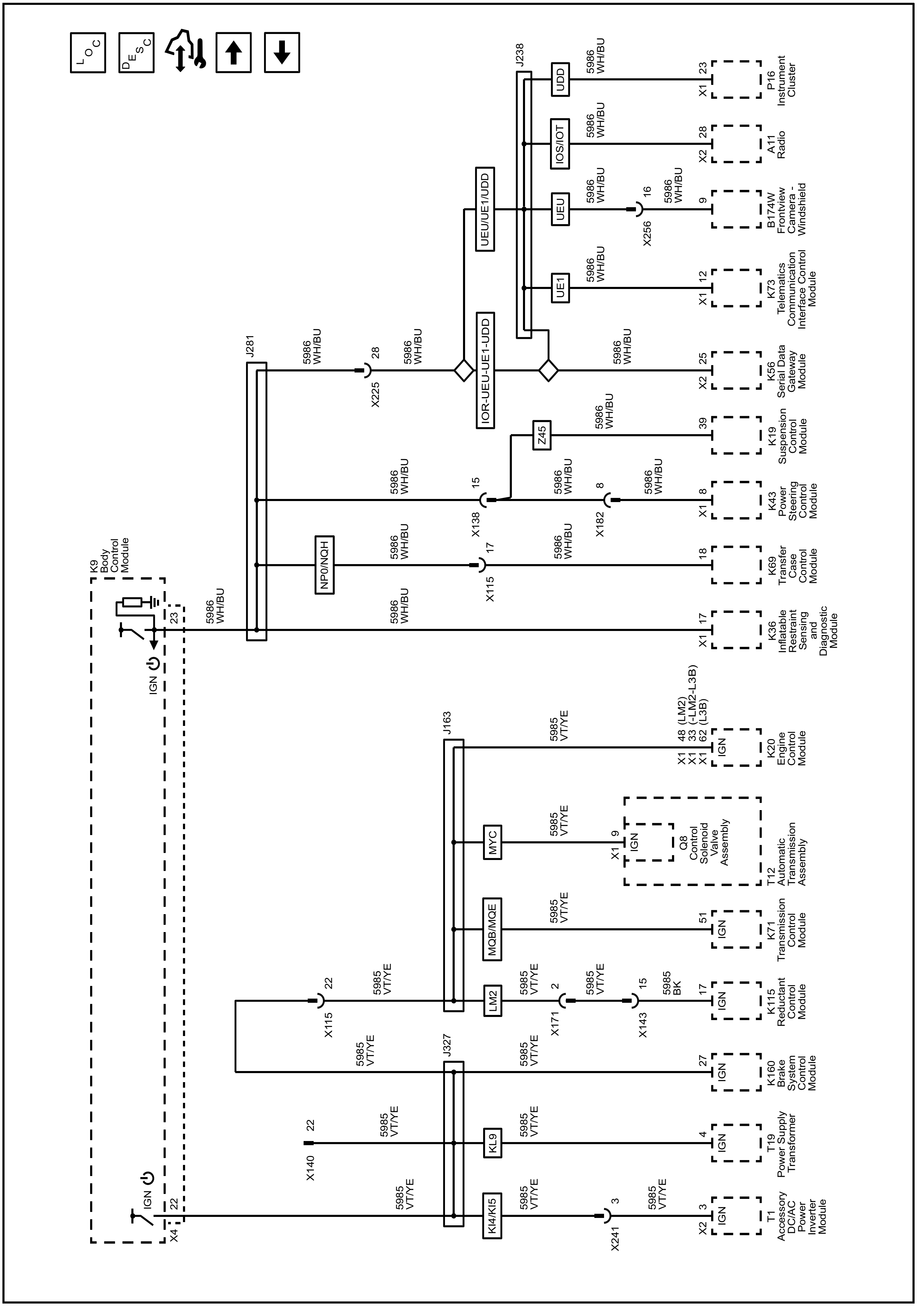

4937702
K56 Serial Data Gateway Module
X1 20
5060 GN
J227
K60 Steering Column Lock Module
8
K33 HVAC Control Module
X2 2
K9 Body Control Module
X2 22
A26 HVAC Controls
3
UEU/UHX
X256 25
B174W Frontview Camera - Windshield
11
X225 10
J202
BTM
K84 Keyless Entry Control Module
X1 3
UD5/UD7
K182 Parking Assist Control Module
X1 4
A45
X310 5
K40 Seat Memory Control Module
X2 1
KI4/KI5
X241 10
T1 Accessory DC/ AC Power Inverter Module
X2 10
K36 Inflatable Restraint Sensing and Diagnostic Module
X1 15
X320 23
K85 Passenger Presence Module
2
K68 Trailer Lighting Control Module
27
U1D
J479
X138 11
BRS
K4 Assist Step Control Module
X2 8
QT6
X926 20
K194 Pickup Box Endgate Control Module
14
UKC
X901 18
J491
B218L Side Object Sensor Module - Left
6
B218R Side Object Sensor Module - Right
6

## Data Communication Schematics (Gateway Isolated Low Speed GMLAN)

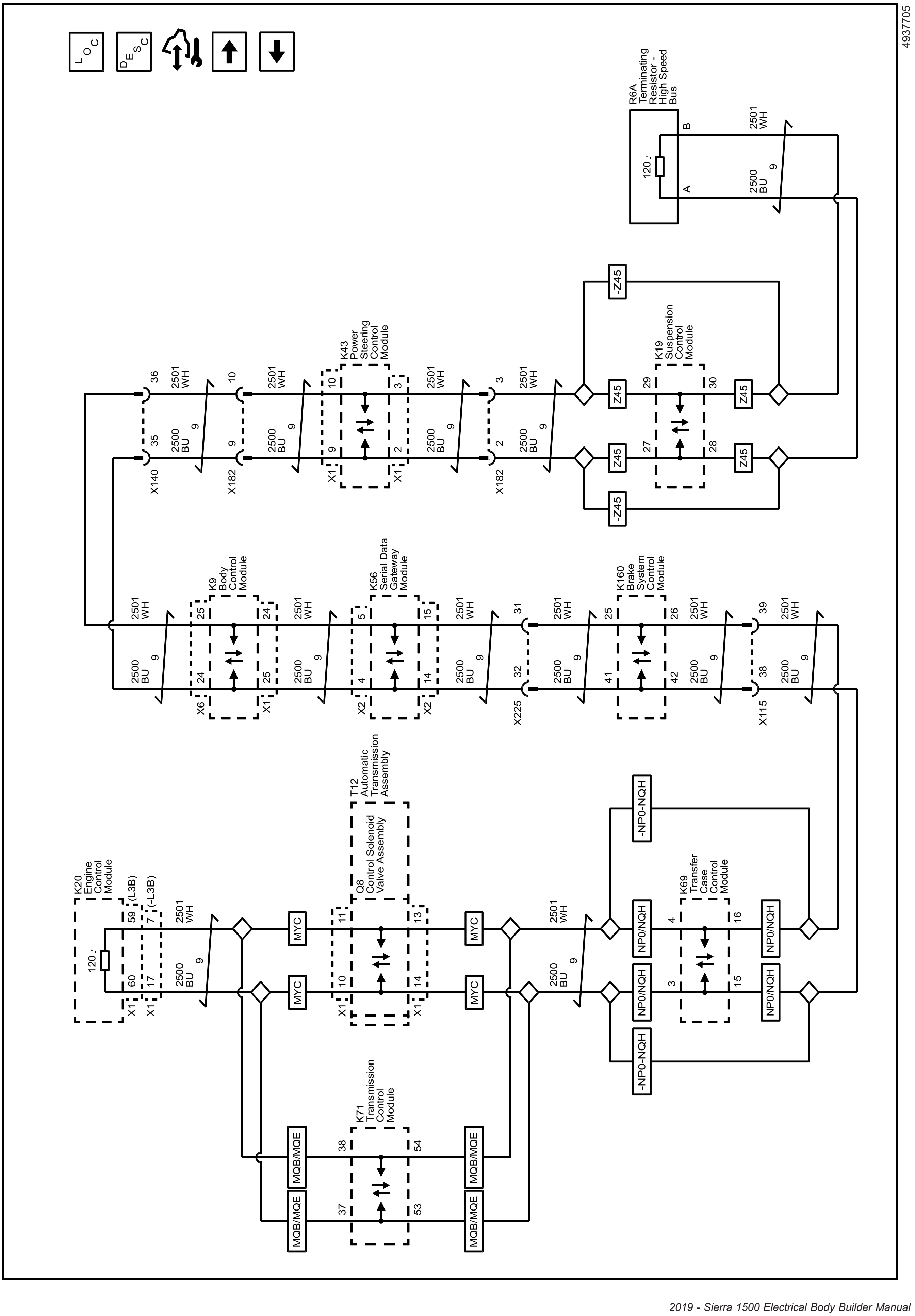

K56
Serial Data
Gateway
Module
X1 30
1102
GY/GN
J242
UQA
UE1
1102
GY/GN
X275 20
-UVI-UV2
UVI/UV2
J330
X1 3
X3 1
X1 9
X1 23
X1 12 (IOR)
X2 18 (IOS/IOT)
P16
Instrument
Cluster
T3
Audio
Amplifier
K157
Video
Processing
Control
Module
K73
Telematics
Communication
Interface
Control Module
A11
Radio

5040452

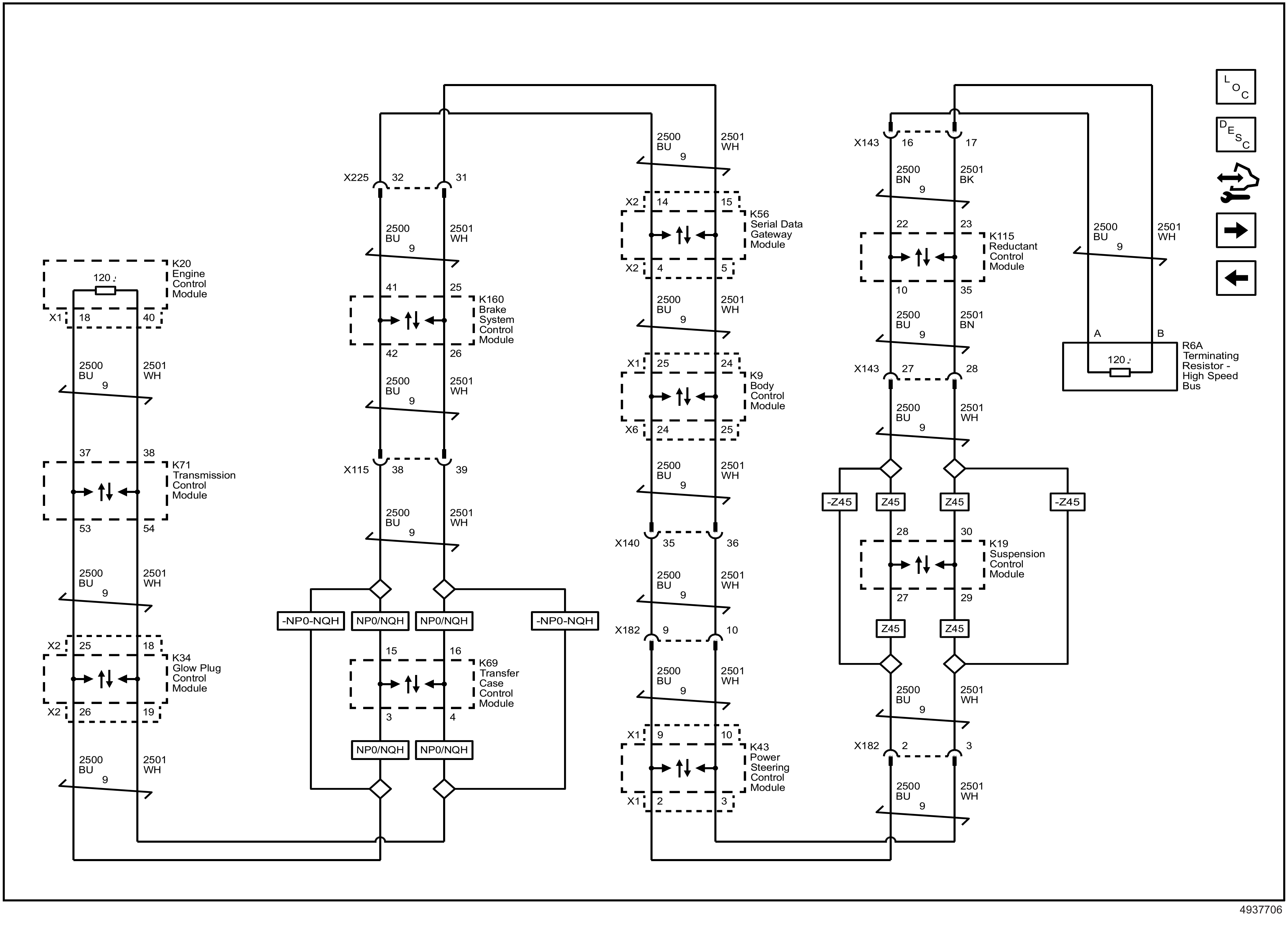
# Data Communication Schematics (Communications Enable - High Speed GMLAN)


4937701
LOC
DESC
K9 Body Control Module
IGN
23
22
X4
5986 WH/BU
5985 VT/YE
J281
J238
J163
J327
UEU/UE1/UDD
IOR-UEU-UE1-UDD
UDD
IOS/IOT
UEU
UE1
Z45
NP0/NQH
MYC
MQB/MQE
LM2
KL9
KI4/KI5
X225 28
X256 16
X138 15
X182 8
X115 17
X115 22
X171 2
X143 15
X140 22
X241 3
5985 BK
X1 23 P16 Instrument Cluster
X2 28 A11 Radio
9 B174W Frontview Camera - Windshield
X1 12 K73 Telematics Communication Interface Control Module
X2 25 K56 Serial Data Gateway Module
39 K19 Suspension Control Module
X1 8 K43 Power Steering Control Module
18 K69 Transfer Case Control Module
X1 17 K36 Inflatable Restraint Sensing and Diagnostic Module
X1 48 (LM2)
X1 33 (-LM2-L3B)
X1 62 (L3B)
K20 Engine Control Module
X1 9 Q8 Control Solenoid Valve Assembly
T12 Automatic Transmission Assembly
51 K71 Transmission Control Module
17 K115 Reductant Control Module
27 K160 Brake System Control Module
4 T19 Power Supply Transformer
X2 3 T1 Accessory DC/AC Power Inverter Module

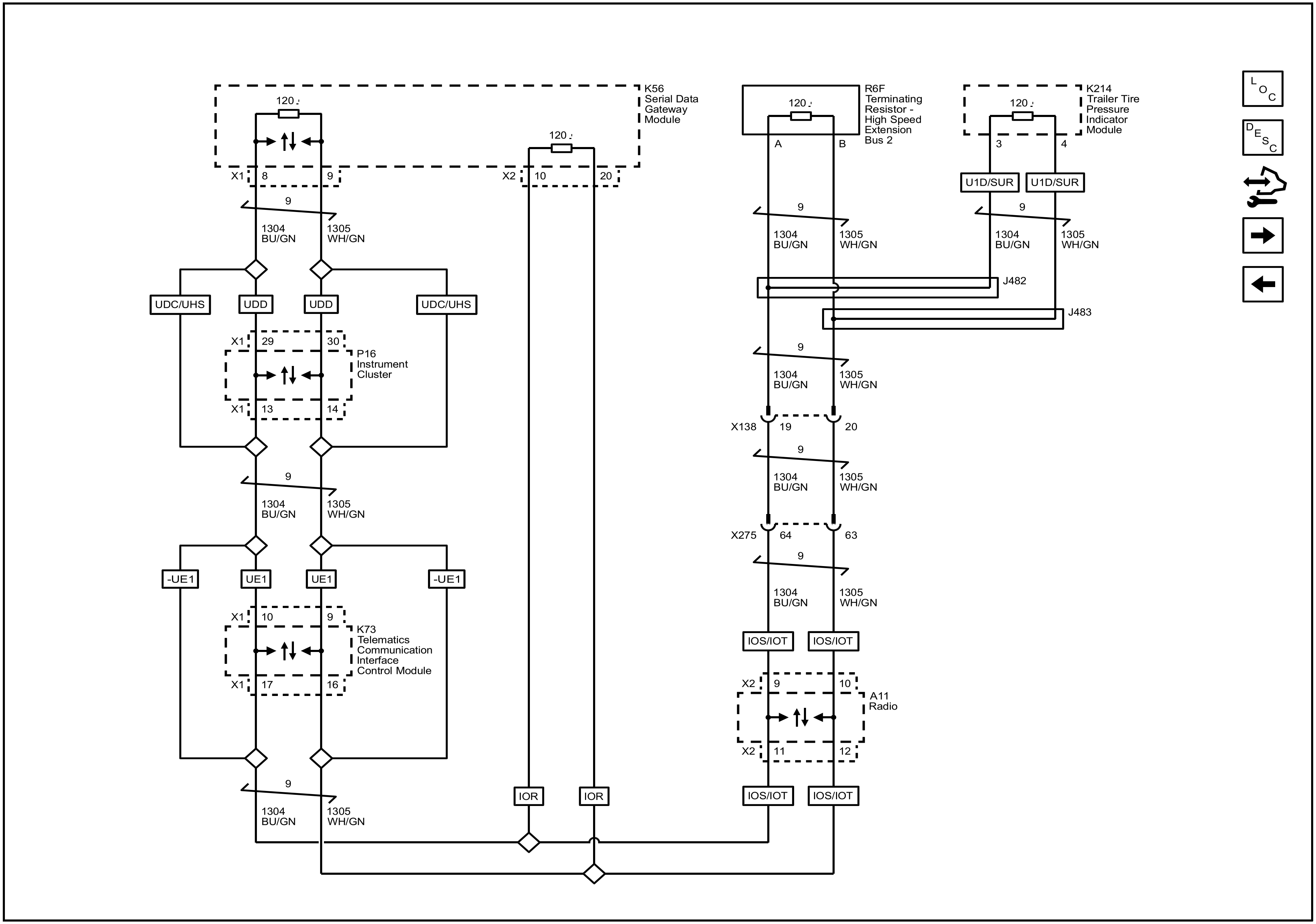
## Data Communication Schematics (High Speed GMLAN (-LM2))


4937705
LOC
DESC
R6A Terminating Resistor - High Speed Bus
120 Ω
A
B
2500 BU 9
2501 WH
-Z45
Z45
K19 Suspension Control Module
27
28
29
30
K43 Power Steering Control Module
X1 9
X1 2
10
3
X140
35
36
X182
9
10
X182
2
3
K9 Body Control Module
X6 24
X1 25
25
24
K56 Serial Data Gateway Module
X2 4
X2 14
5
15
X225
32
31
K160 Brake System Control Module
41
42
25
26
X115
38
39
K20 Engine Control Module
120 Ω
X1 60
X1 17
59 (L3B)
7 (-L3B)
MYC
T12 Automatic Transmission Assembly
Q8 Control Solenoid Valve Assembly
X1 10
X1 14
11
13
K69 Transfer Case Control Module
3
4
15
16
NP0/NQH
-NP0-NQH
K71 Transmission Control Module
37
38
53
54
MQB/MQE

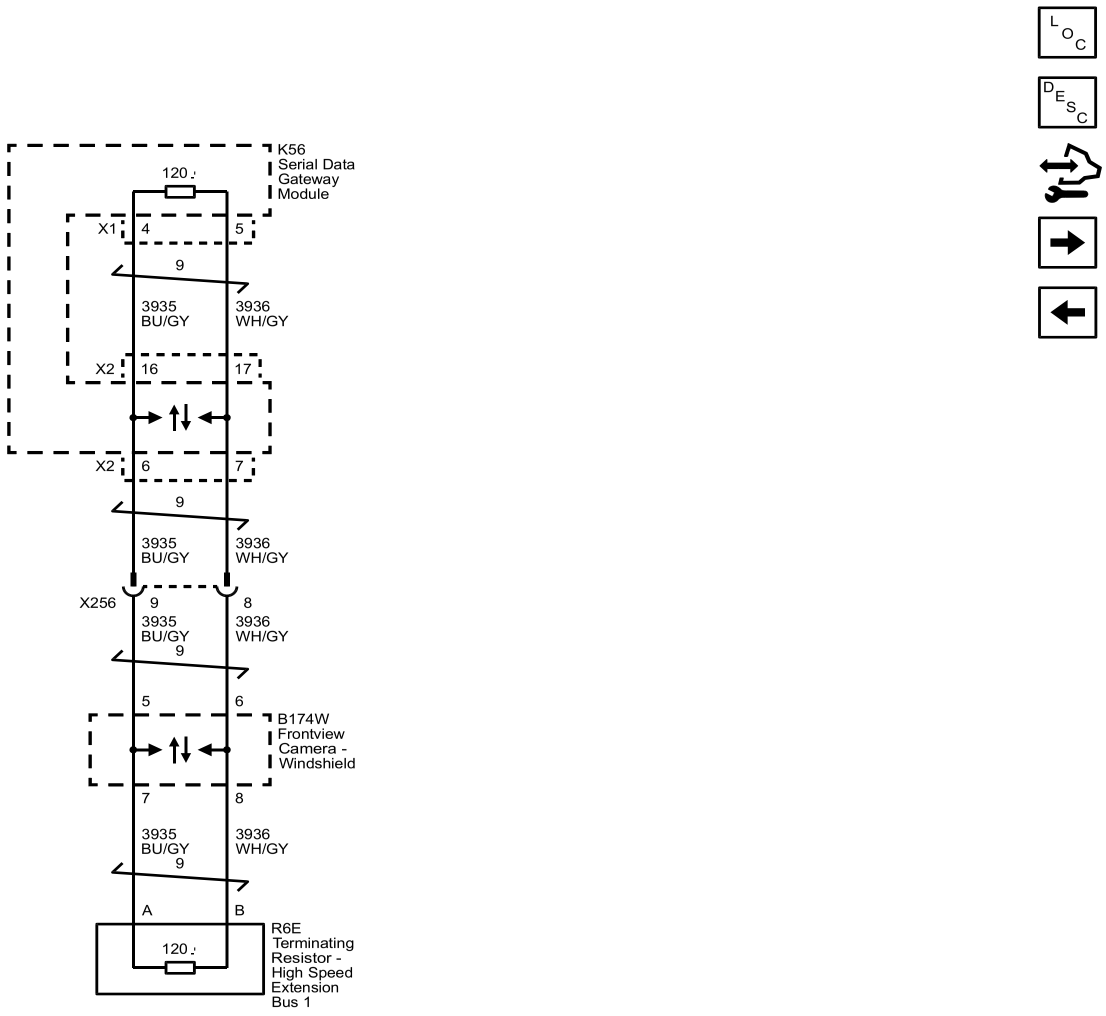
## Data Communication Schematics (High Speed GMLAN (LM2))


L O C
D E S C
K20 Engine Control Module
120 Ω
X1 18 40
2500 BU 9
2501 WH
K71 Transmission Control Module
37 38 53 54
K34 Glow Plug Control Module
X2 25 18
X2 26 19
X225 32 31
K160 Brake System Control Module
41 25 42 26
X115 38 39
NP0/NQH
-NP0-NQH
K69 Transfer Case Control Module
15 16 3 4
K56 Serial Data Gateway Module
X2 14 15
X2 4 5
K9 Body Control Module
X1 25 24
X6 24 25
X140 35 36
X182 9 10
K43 Power Steering Control Module
X1 9 10
X1 2 3
X143 16 17
2500 BN 9
2501 BK
K115 Reductant Control Module
22 23 10 35
2501 BN
X143 27 28
Z45
-Z45
K19 Suspension Control Module
28 30 27 29
X182 2 3
R6A Terminating Resistor - High Speed Bus
A B
120 Ω
4937706

## Data Communication Schematics (Gateway Isolated High Speed GMLAN)

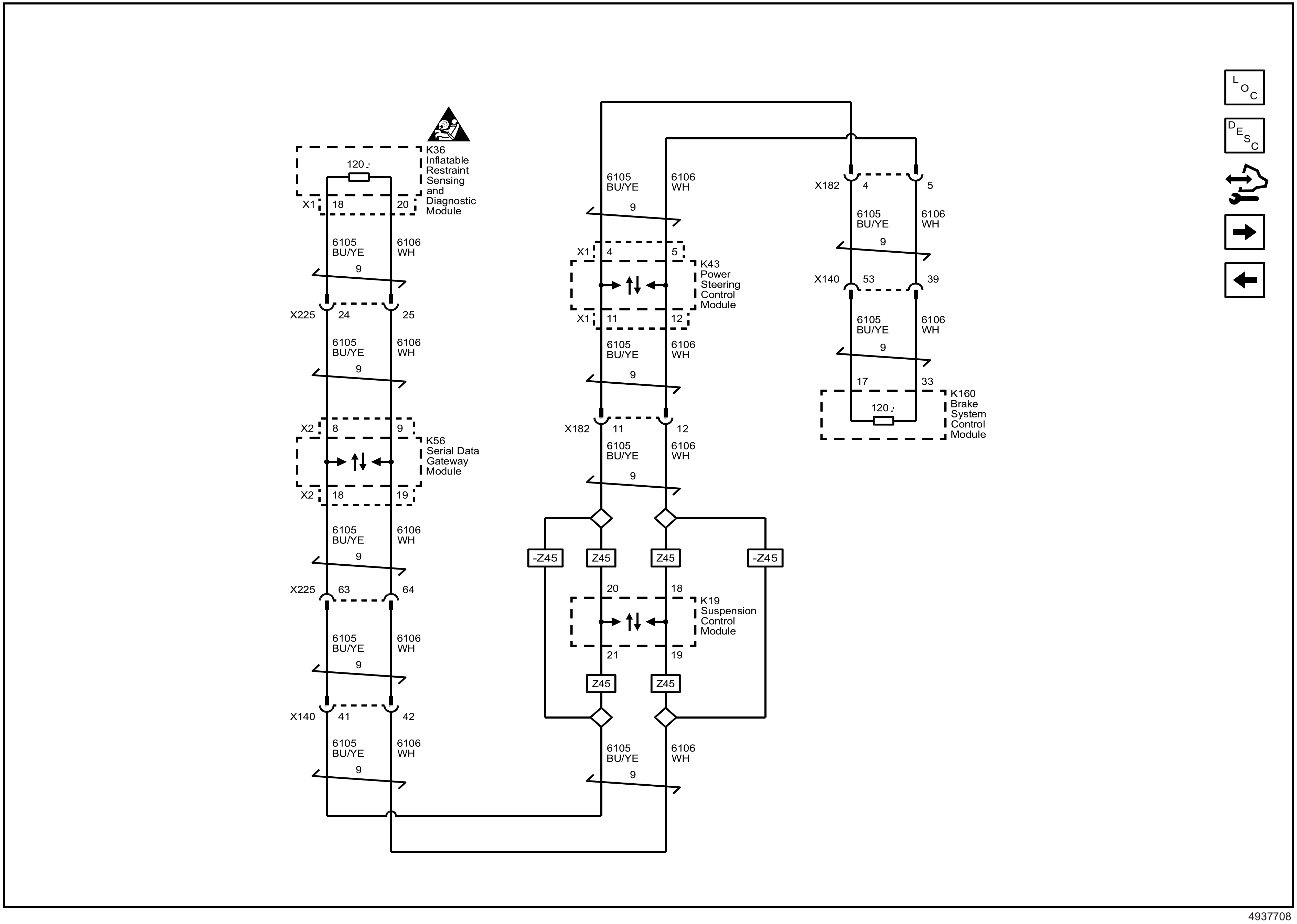

K56
Serial Data
Gateway
Module
120 Ω
X1 8 9
X2 10 20
9
1304 BU/GN
1305 WH/GN
UDC/UHS
UDD
UDD
UDC/UHS
X1 29 30
P16
Instrument
Cluster
X1 13 14
-UE1
UE1
UE1
-UE1
X1 10 9
K73
Telematics
Communication
Interface
Control Module
X1 17 16
IOR
IOR
R6F
Terminating
Resistor -
High Speed
Extension
Bus 2
A B
K214
Trailer Tire
Pressure
Indicator
Module
3 4
U1D/SUR
U1D/SUR
J482
J483
X138 19 20
X275 64 63
IOS/IOT
IOS/IOT
X2 9 10
A11
Radio
X2 11 12
L O C
D E S C
4937704

## Data Communication Schematics (Gateway Expansion High Speed GMLAN (UEU/UHX))

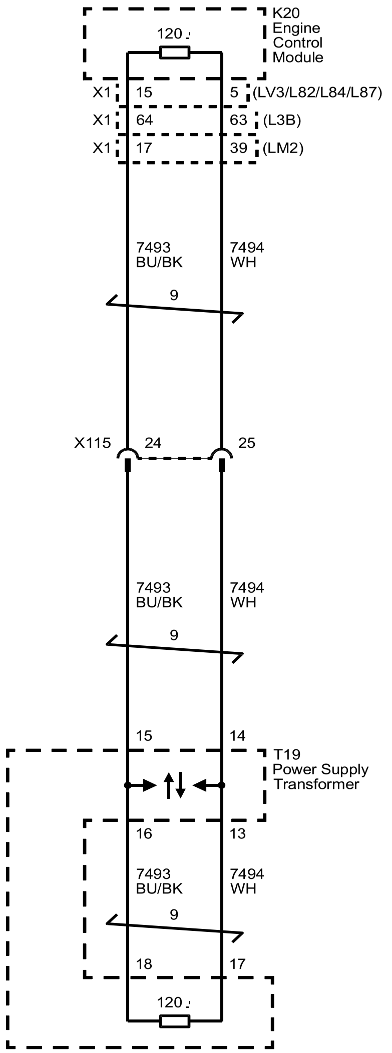

L O C
D E S C
K56
Serial Data
Gateway
Module
120 Ω
X1
4
5
9
3935
BU/GY
3936
WH/GY
X2
16
17
X2
6
7
9
3935
BU/GY
3936
WH/GY
X256
9
8
3935
BU/GY
3936
WH/GY
9
5
6
B174W
Frontview
Camera -
Windshield
7
8
3935
BU/GY
3936
WH/GY
9
A
B
R6E
Terminating
Resistor -
High Speed
Extension
Bus 1
120 Ω

4937707

## Data Communication Schematics (Chassis High Speed GMLAN)

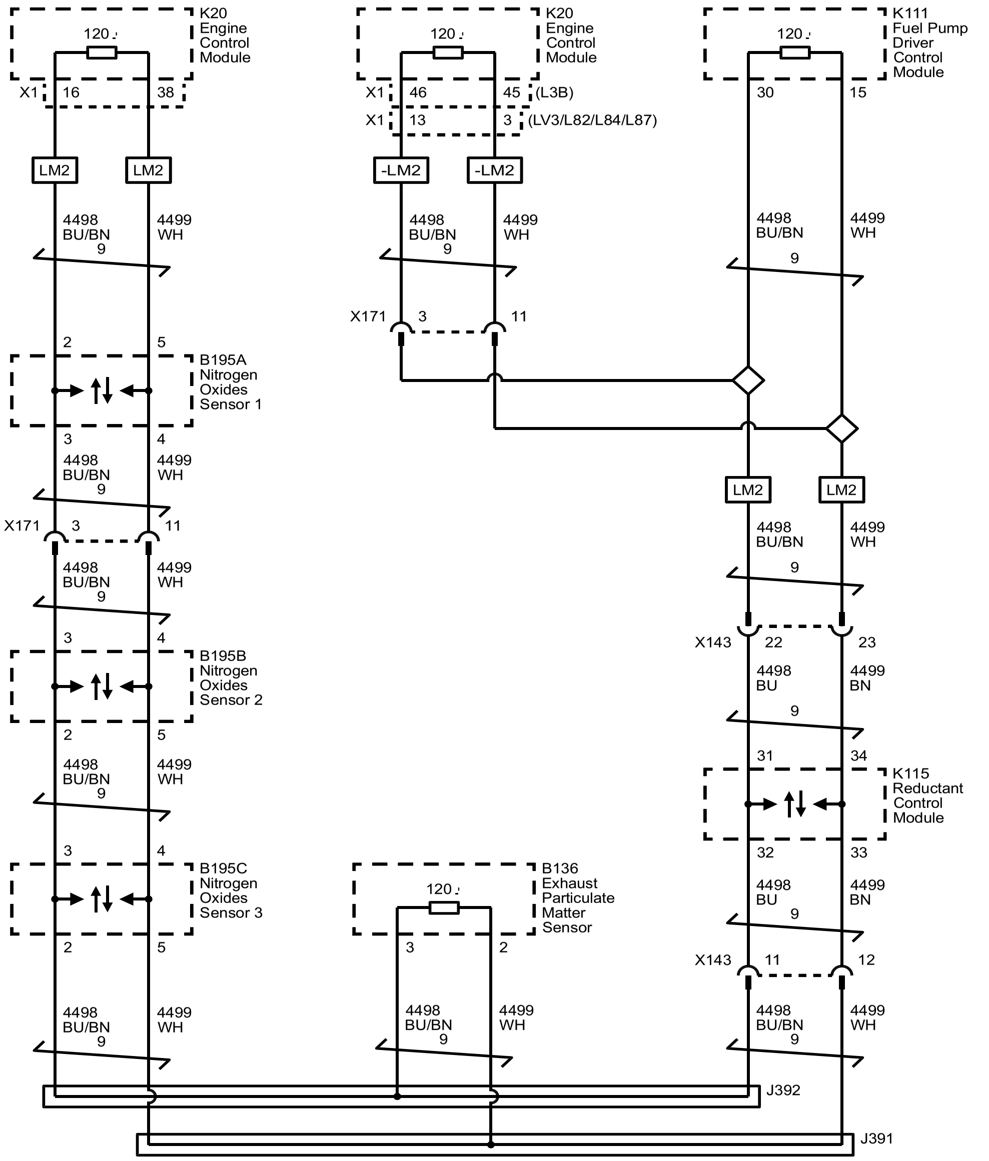

L O C
D E S C
K36
Inflatable
Restraint
Sensing
and
Diagnostic
Module
120 Ω
X1
18
20
6105
BU/YE
6106
WH
9
X225
24
25
K56
Serial Data
Gateway
Module
X2
8
9
X2
18
19
X225
63
64
X140
41
42
K43
Power
Steering
Control
Module
X1
4
5
X1
11
12
X182
11
12
Z45
-Z45
K19
Suspension
Control
Module
20
18
21
19
X182
4
5
X140
53
39
K160
Brake
System
Control
Module
17
33
120 Ω
4937708

# Data Communication Schematics (Powertrain High Speed GMLAN (KL9))

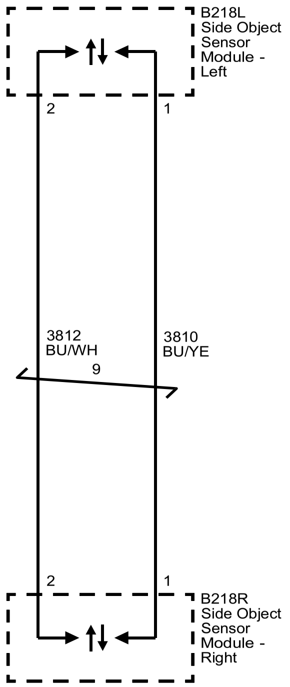

K20
Engine
Control
Module
120 Ω
X1 15 5 (LV3/L82/L84/L87)
X1 64 63 (L3B)
X1 17 39 (LM2)
7493
BU/BK
7494
WH
9
X115 24 25
7493
BU/BK
7494
WH
9
15 14
T19
Power Supply
Transformer
16 13
7493
BU/BK
7494
WH
9
18 17
120 Ω

4937709

## Data Communication Schematics (Powertrain Sensor High Speed GMLAN)

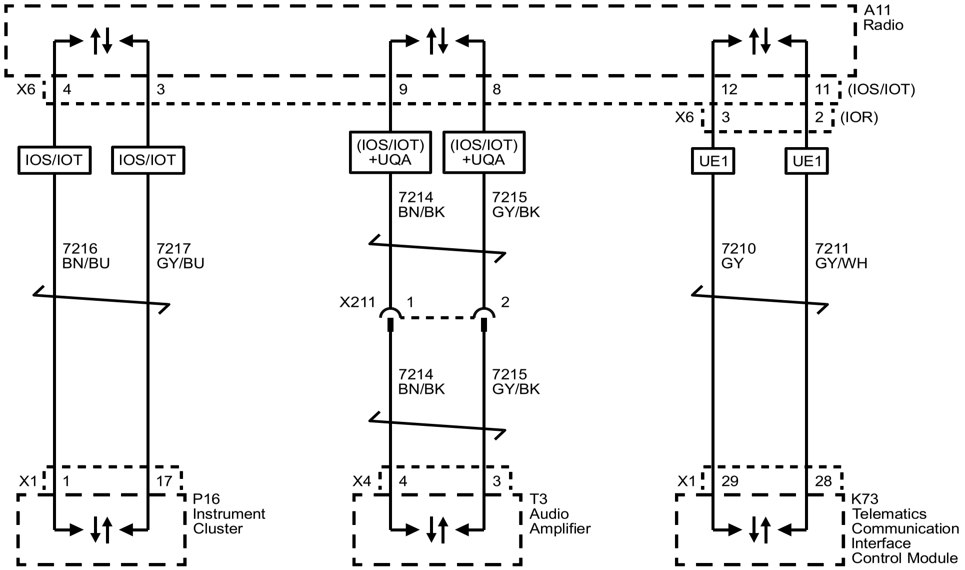

K20 Engine Control Module
120 Ω
X1 16 38
LM2
4498 BU/BN 9
4499 WH
B195A Nitrogen Oxides Sensor 1
2 5
3 4
X171 3 11
B195B Nitrogen Oxides Sensor 2
B195C Nitrogen Oxides Sensor 3
K20 Engine Control Module
X1 46 45 (L3B)
X1 13 3 (LV3/L82/L84/L87)
-LM2
X171 3 11
B136 Exhaust Particulate Matter Sensor
3 2
K111 Fuel Pump Driver Control Module
30 15
X143 22 23
4498 BU
4499 BN
K115 Reductant Control Module
31 34
32 33
X143 11 12
J392
J391
4960844

## Data Communication Schematics (Object High Speed GMLAN (UKC))


B218L
Side Object
Sensor
Module -
Left
2
1
3812
BU/WH
9
3810
BU/YE
2
1
B218R
Side Object
Sensor
Module -
Right

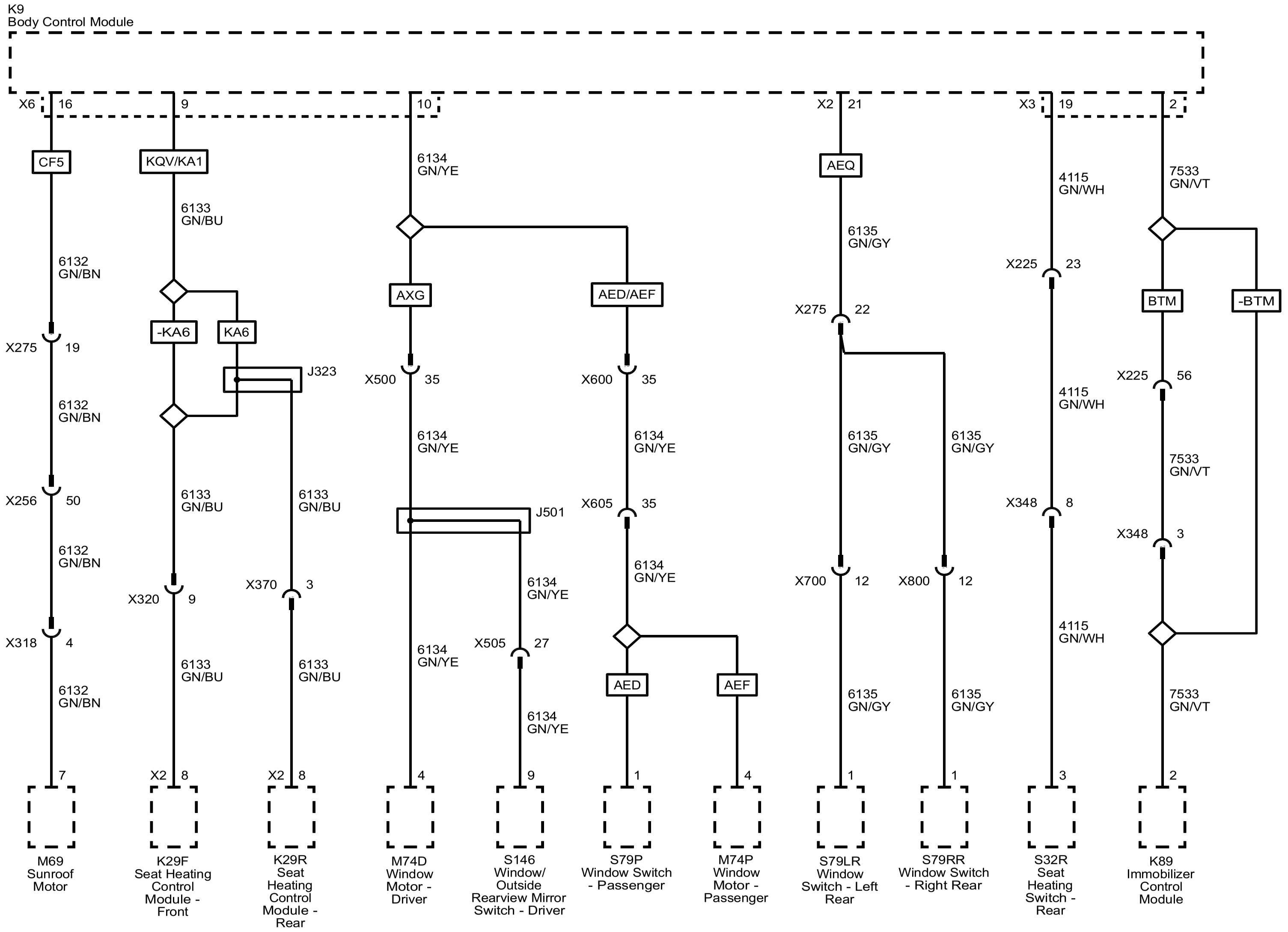
5067761

## Data Communication Schematics (Ethernet Bus)


A11
Radio
X6
4
3
9
8
12
11
(IOS/IOT)
X6
3
2
(IOR)
IOS/IOT
IOS/IOT
(IOS/IOT)
+UQA
(IOS/IOT)
+UQA
UE1
UE1
7216
BN/BU
7217
GY/BU
7214
BN/BK
7215
GY/BK
7210
GY
7211
GY/WH
X211
1
2
7214
BN/BK
7215
GY/BK
X1
1
17
P16
Instrument
Cluster
X4
4
3
T3
Audio
Amplifier
X1
29
28
K73
Telematics
Communication
Interface
Control Module

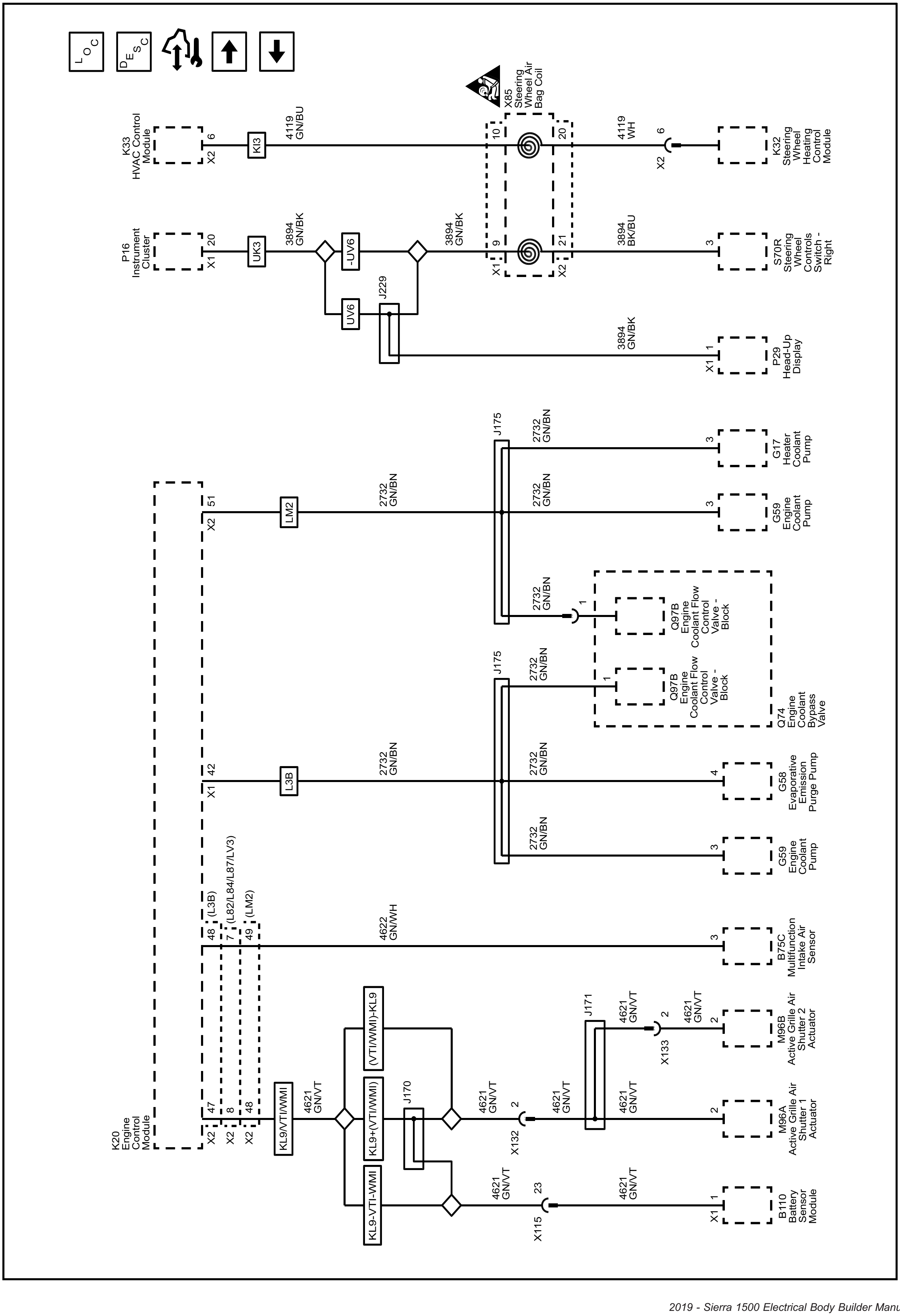
5040453

## Data Communication Schematics (Local Interconnect Network (1 of 3))

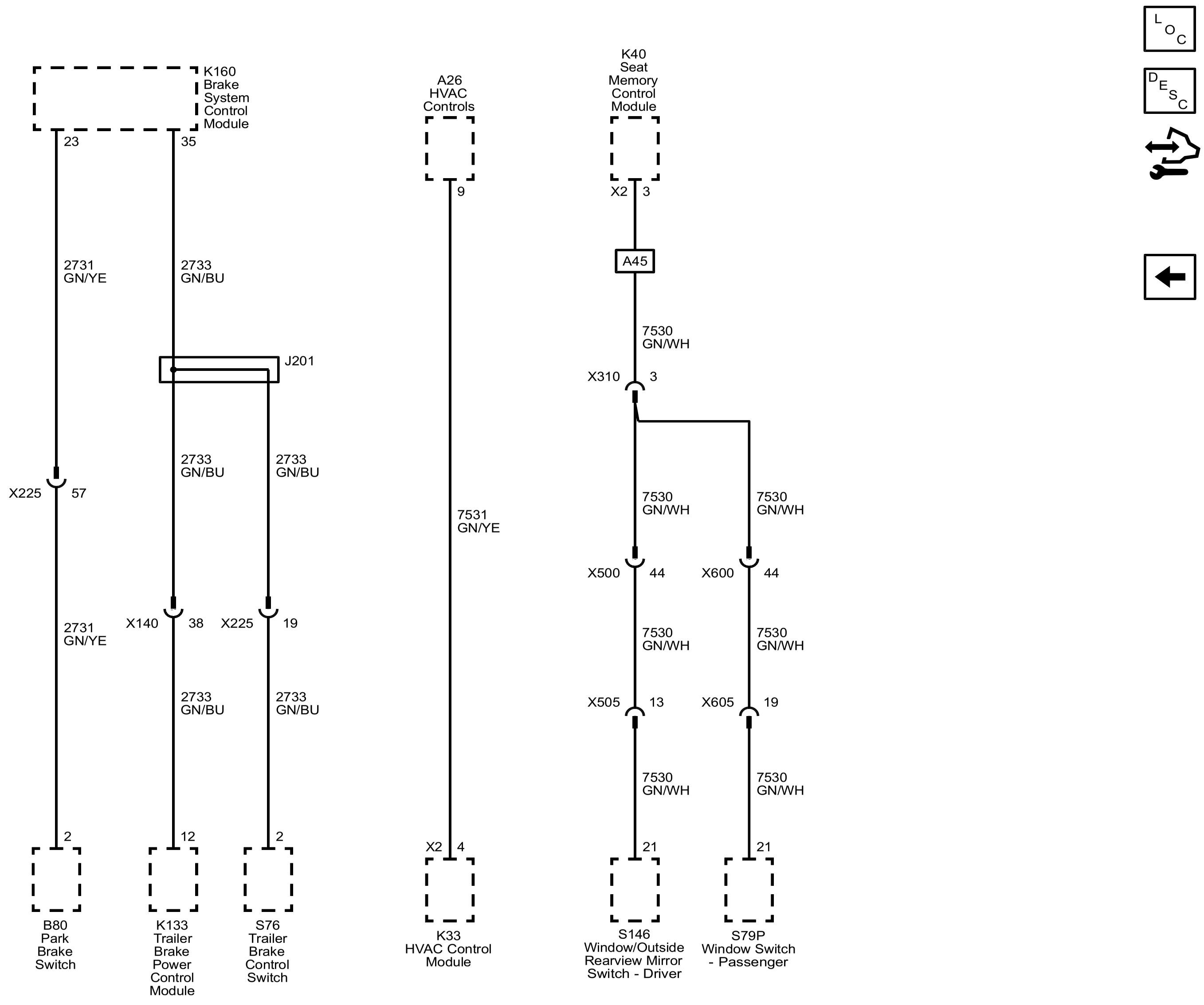

K9
Body Control Module
X6 16
CF5
6132 GN/BN
X275 19
X256 50
X318 4
7
M69 Sunroof Motor
9
KQV/KA1
6133 GN/BU
-KA6
KA6
J323
X320 9
X370 3
X2 8
K29F Seat Heating Control Module - Front
K29R Seat Heating Control Module - Rear
10
6134 GN/YE
AXG
X500 35
J501
X505 27
4
M74D Window Motor - Driver
9
S146 Window/ Outside Rearview Mirror Switch - Driver
AED/AEF
X600 35
X605 35
AED
AEF
1
S79P Window Switch - Passenger
4
M74P Window Motor - Passenger
X2 21
AEQ
6135 GN/GY
X275 22
X700 12
X800 12
1
S79LR Window Switch - Left Rear
S79RR Window Switch - Right Rear
X3 19
4115 GN/WH
X225 23
X348 8
3
S32R Seat Heating Switch - Rear
2
7533 GN/VT
BTM
-BTM
X225 56
X348 3
K89 Immobilizer Control Module

4937710

## Data Communication Schematics (Local Interconnect Network (2 of 3))

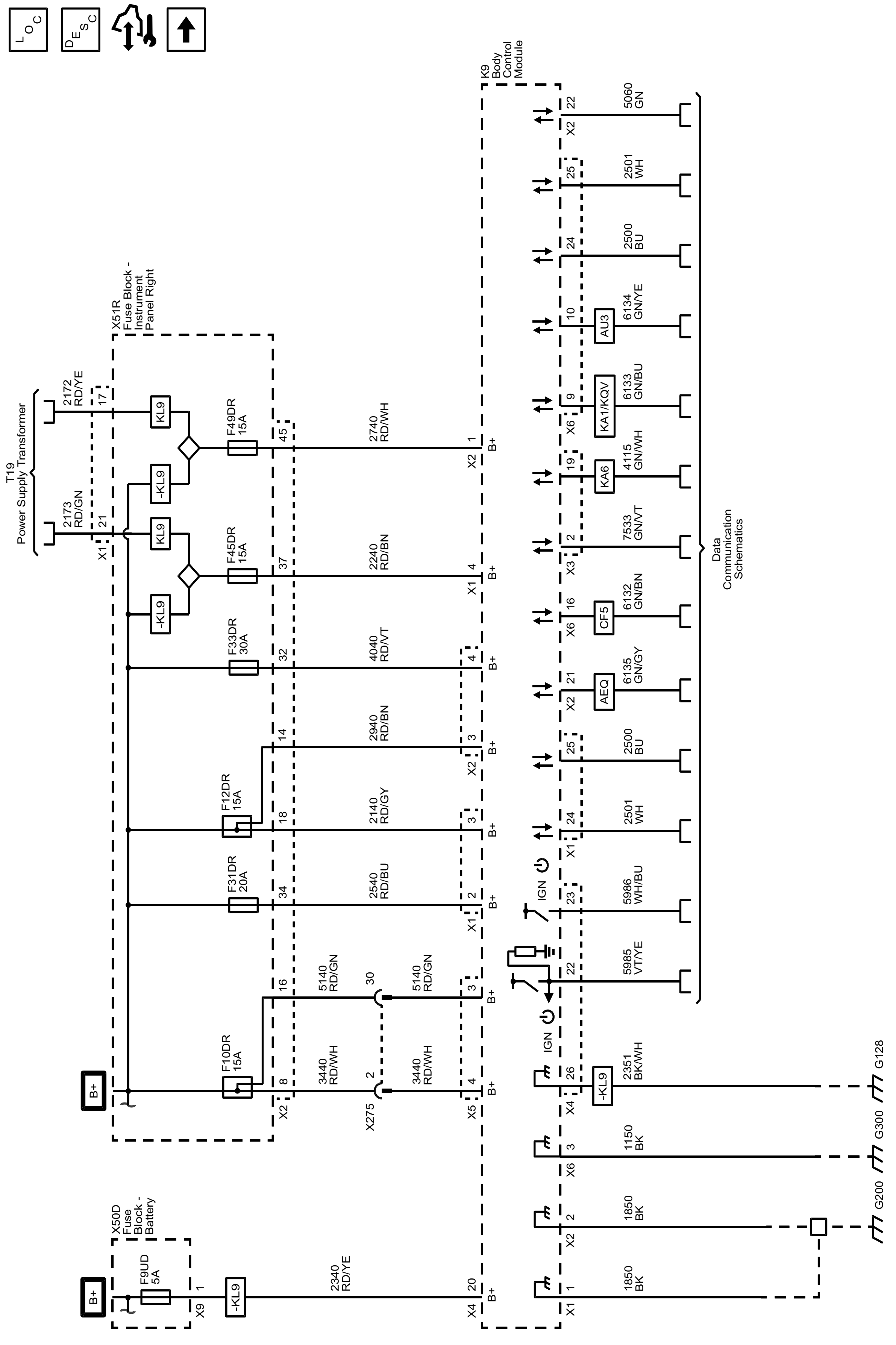

4937712
LOC
DESC
K33 HVAC Control Module
X2 6
KI3
4119 GN/BU
X85 Steering Wheel Air Bag Coil
10
20
4119 WH
6
X2
K32 Steering Wheel Heating Control Module
P16 Instrument Cluster
X1 20
UK3
3894 GN/BK
-UV6
3894 GN/BK
X1 9
21 X2
3894 BK/BU
3
S70R Steering Wheel Controls Switch - Right
UV6
J229
3894 GN/BK
X1 1
P29 Head-Up Display
J175
2732 GN/BN
3
G17 Heater Coolant Pump
X2 51
LM2
2732 GN/BN
2732 GN/BN
3
G59 Engine Coolant Pump
2732 GN/BN
1
Q97B Engine Coolant Flow Control Valve - Block
J175
2732 GN/BN
1
Q97B Engine Coolant Flow Control Valve - Block
Q74 Engine Coolant Bypass Valve
X1 42
L3B
2732 GN/BN
2732 GN/BN
4
G58 Evaporative Emission Purge Pump
2732 GN/BN
3
G59 Engine Coolant Pump
48 (L3B)
7 (L82/L84/L87/LV3)
49 (LM2)
4622 GN/WH
3
B75C Multifunction Intake Air Sensor
K20 Engine Control Module
X2 47
X2 8
X2 48
KL9/VTI/WMI
4621 GN/VT
KL9+(VTI/WMI)
KL9-VTI-WMI
(VTI/WMI)-KL9
J170
4621 GN/VT
2
X132
4621 GN/VT
J171
4621 GN/VT
2
X133
4621 GN/VT
2
M96B Active Grille Air Shutter 2 Actuator
4621 GN/VT
2
M96A Active Grille Air Shutter 1 Actuator
4621 GN/VT
23
X115
4621 GN/VT
X1 1
B110 Battery Sensor Module

# Data Communication Schematics (Local Interconnect Network (3 of 3))


K160
Brake
System
Control
Module
23
35
2731
GN/YE
2733
GN/BU
J201
X225
57
2733
GN/BU
2733
GN/BU
X140
38
X225
19
2731
GN/YE
2733
GN/BU
2733
GN/BU
2
12
2
B80
Park
Brake
Switch
K133
Trailer
Brake
Power
Control
Module
S76
Trailer
Brake
Control
Switch
A26
HVAC
Controls
9
7531
GN/YE
X2
4
K33
HVAC Control
Module
K40
Seat
Memory
Control
Module
X2
3
A45
7530
GN/WH
X310
3
7530
GN/WH
7530
GN/WH
X500
44
X600
44
7530
GN/WH
7530
GN/WH
X505
13
X605
19
7530
GN/WH
7530
GN/WH
21
21
S146
Window/Outside
Rearview Mirror
Switch - Driver
S79P
Window Switch
- Passenger
LOC
DESC

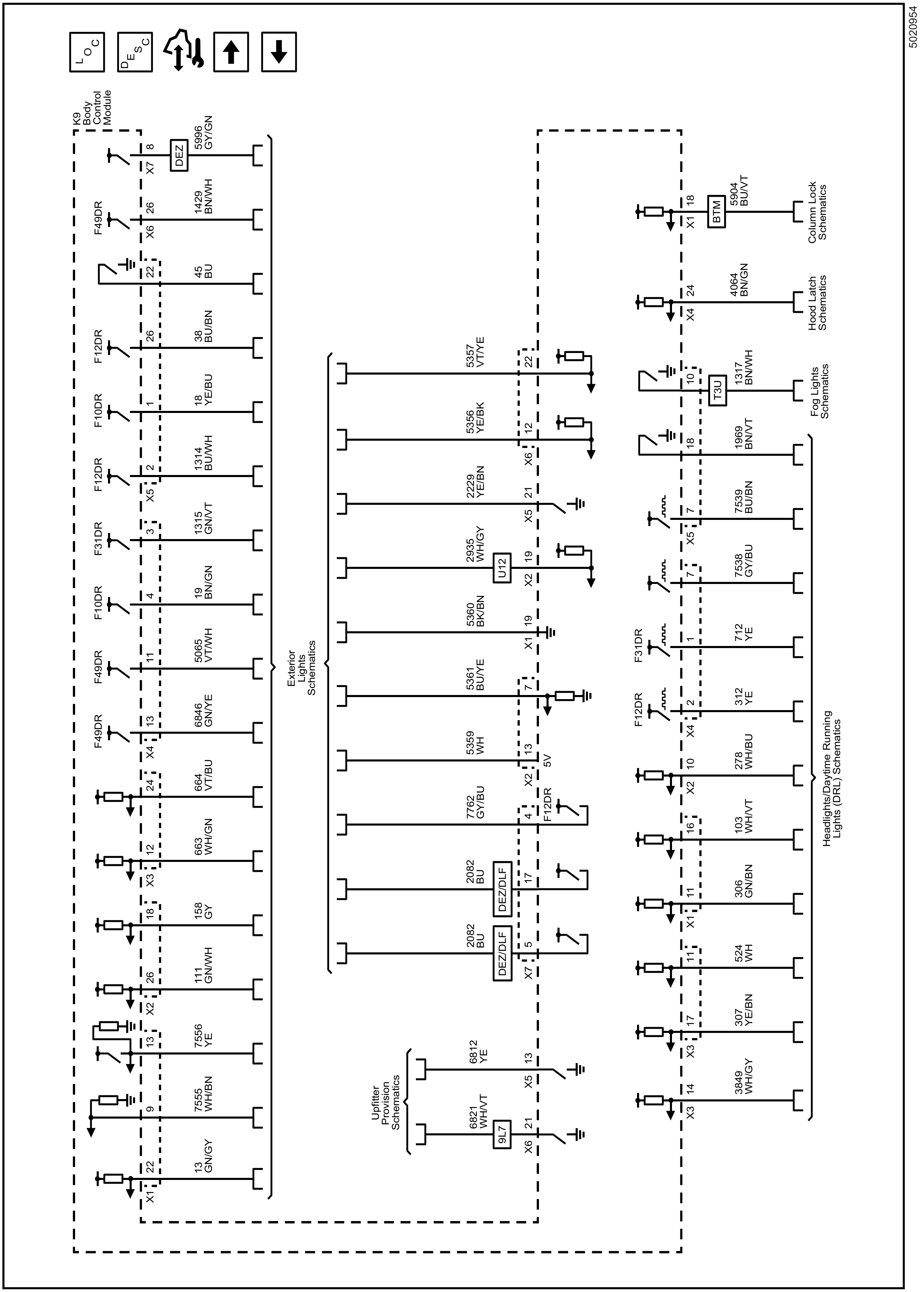
4937713

## Body Control System Schematics (Module Power, Ground and Serial Data)

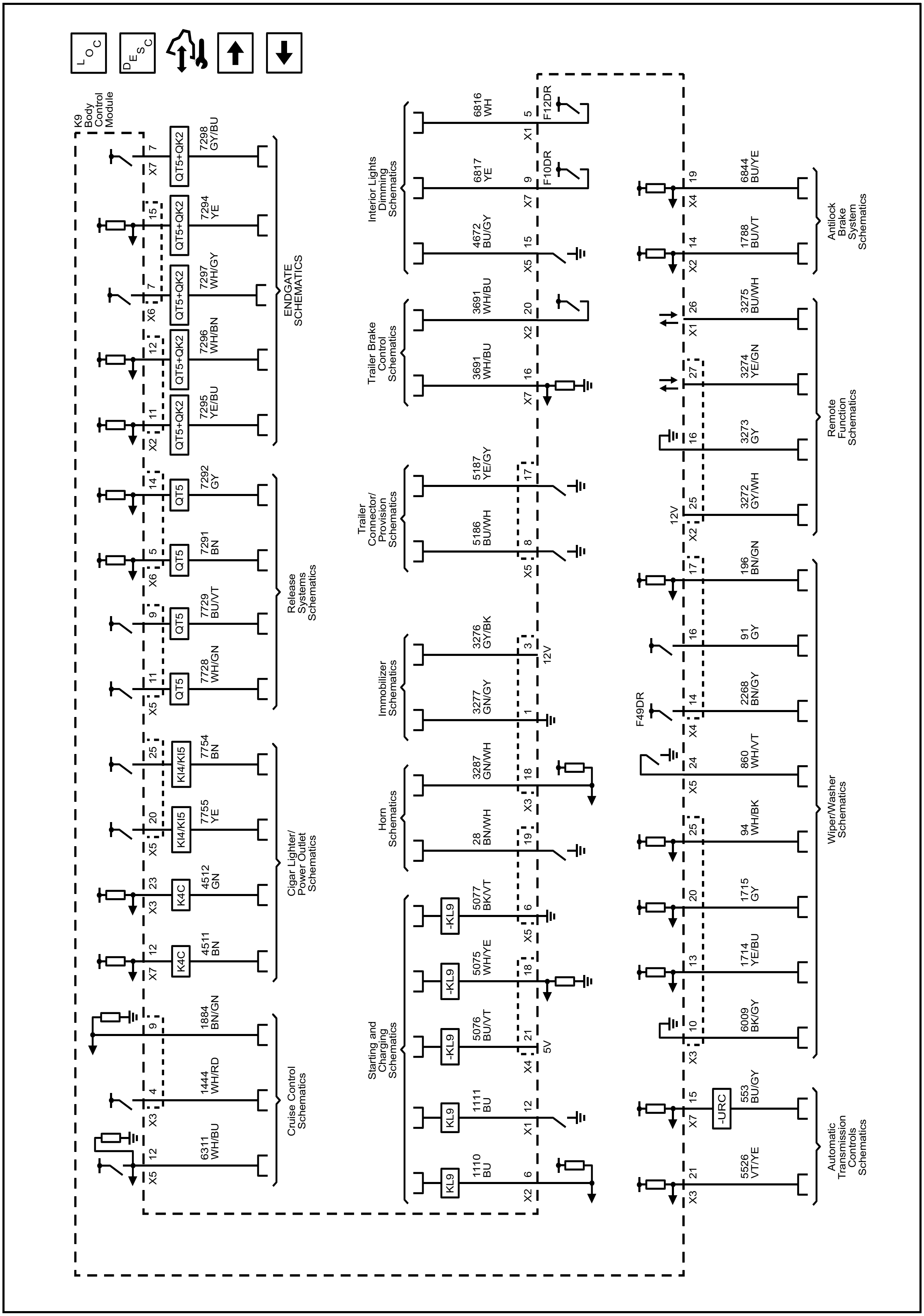

LOC
DESC
T19 Power Supply Transformer
2172 RD/YE
2173 RD/GN
17
21
X1
X51R Fuse Block - Instrument Panel Right
KL9
-KL9
KL9
-KL9
F49DR 15A
F45DR 15A
F33DR 30A
F12DR 15A
F31DR 20A
F10DR 15A
45
37
32
14
18
34
16
8
X2
B+
2740 RD/WH
2240 RD/BN
4040 RD/VT
2940 RD/BN
2140 RD/GY
2540 RD/BU
5140 RD/GN
3440 RD/WH
30
2
X275
5140 RD/GN
3440 RD/WH
X2 1 B+
X1 4 B+
4 B+
X2 3 B+
3 B+
X1 2 B+
3 B+
X5 4 B+
X50D Fuse Block - Battery
F9UD 5A
B+
X9 1
-KL9
2340 RD/YE
X4 20 B+
K9 Body Control Module
X2 22
5060 GN
25
2501 WH
24
2500 BU
10
AU3
6134 GN/YE
X6 9
KA1/KQV
6133 GN/BU
19
KA6
4115 GN/WH
X3 2
7533 GN/VT
X6 16
CF5
6132 GN/BN
X2 21
AEQ
6135 GN/GY
25
2500 BU
X1 24
2501 WH
IGN
23
5986 WH/BU
22
5985 VT/YE
IGN
X4 26
-KL9
2351 BK/WH
G128
X6 3
1150 BK
G300
X2 2
1850 BK
G200
X1 1
1850 BK
Data Communication Schematics

5020953

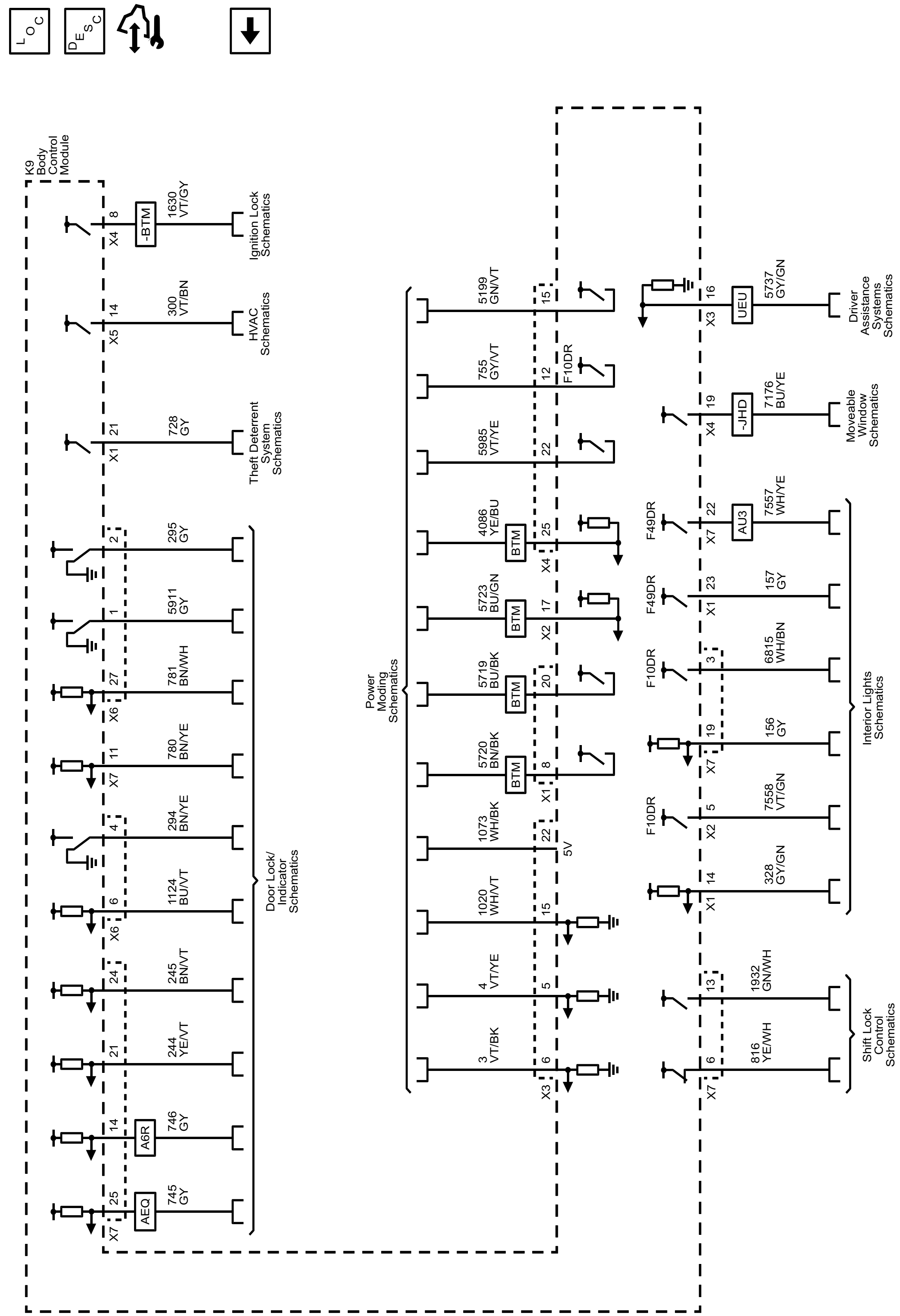
# Body Control System Schematics (Subsystem References (1 of 3))


5020954
LOC
DESC
K9 Body Control Module
X7 8 DEZ 5996 GY/GN
F49DR X6 26 1429 BN/WH
22 45 BU
F12DR 26 38 BU/BN
F10DR 1 18 YE/BU
F12DR X5 2 1314 BU/WH
F31DR 3 1315 GN/VT
F10DR 4 19 BN/GN
F49DR 11 5065 VT/WH
F49DR X4 13 6846 GN/YE
24 664 VT/BU
X3 12 663 WH/GN
18 158 GY
X2 26 111 GN/WH
13 7556 YE
9 7555 WH/BN
X1 22 13 GN/GY
Exterior Lights Schematics
5357 VT/YE 22
X6 12 5356 YE/BK
X5 21 2229 YE/BN
X2 19 U12 2935 WH/GY
X1 19 5360 BK/BN
7 5361 BU/YE
X2 13 5V 5359 WH
4 F12DR 7762 GY/BU
17 DEZ/DLF 2082 BU
X7 5 DEZ/DLF 2082 BU
Upfitter Provision Schematics
X5 13 6812 YE
X6 21 9L7 6821 WH/VT
X1 18 BTM 5904 BU/VT
Column Lock Schematics
X4 24 4064 BN/GN
Hood Latch Schematics
10 T3U 1317 BN/WH
Fog Lights Schematics
18 1969 BN/VT
X5 7 7539 BU/BN
7 7538 GY/BU
F31DR 1 712 YE
F12DR X4 2 312 YE
X2 10 278 WH/BU
16 103 WH/VT
X1 11 306 GN/BN
11 524 WH
X3 17 307 YE/BN
X3 14 3849 WH/GY
Headlights/Daytime Running Lights (DRL) Schematics

## Body Control System Schematics (Subsystem References (2 of 3))


5020955
LOC
DESC
K9 Body Control Module
X7 7 QT5+QK2 7298 GY/BU
15 QT5+QK2 7294 YE
X6 7 QT5+QK2 7297 WH/GY
12 QT5+QK2 7296 WH/BN
X2 11 QT5+QK2 7295 YE/BU
ENDGATE SCHEMATICS
14 QT5 7292 GY
X6 5 QT5 7291 BN
9 QT5 7729 BU/VT
X5 11 QT5 7728 WH/GN
Release Systems Schematics
25 KI4/KI5 7754 BN
X5 20 KI4/KI5 7755 YE
X3 23 K4C 4512 GN
X7 12 K4C 4511 BN
Cigar Lighter/ Power Outlet Schematics
9 1884 BN/GN
X3 4 1444 WH/RD
X5 12 6311 WH/BU
Cruise Control Schematics
X1 5 F12DR 6816 WH
X7 9 F10DR 6817 YE
X5 15 4672 BU/GY
Interior Lights Dimming Schematics
X2 20 3691 WH/BU
X7 16 3691 WH/BU
Trailer Brake Control Schematics
17 5187 YE/GY
X5 8 5186 BU/WH
Trailer Connector/ Provision Schematics
3 12V 3276 GY/BK
1 3277 GN/GY
Immobilizer Schematics
X3 18 3287 GN/WH
19 28 BN/WH
Horn Schematics
X5 6 -KL9 5077 BK/VT
18 -KL9 5075 WH/YE
X4 21 5V -KL9 5076 BU/VT
X1 12 KL9 1111 BU
X2 6 KL9 1110 BU
Starting and Charging Schematics
X4 19 6844 BU/YE
X2 14 1788 BU/VT
Antilock Brake System Schematics
X1 26 3275 BU/WH
27 3274 YE/GN
16 3273 GY
X2 25 12V 3272 GY/WH
Remote Function Schematics
17 196 BN/GN
16 91 GY
X4 14 F49DR 2268 BN/GY
X5 24 860 WH/VT
25 94 WH/BK
20 1715 GY
13 1714 YE/BU
X3 10 6009 BK/GY
Wiper/Washer Schematics
X7 15 -URC 553 BU/GY
X3 21 5526 VT/YE
Automatic Transmission Controls Schematics

# Body Control System Schematics (Subsystem References (3 of 3))



LOC
DESC
K9 Body Control Module
X4 8 -BTM 1630 VT/GY Ignition Lock Schematics
X5 14 300 VT/BN HVAC Schematics
X1 21 728 GY Theft Deterrent System Schematics
2 295 GY
1 5911 GY
X6 27 781 BN/WH
X7 11 780 BN/YE
4 294 BN/YE
X6 6 1124 BU/VT
24 245 BN/VT
21 244 YE/VT
14 A6R 746 GY
X7 25 AEQ 745 GY
Door Lock/ Indicator Schematics
Power Moding Schematics
15 5199 GN/VT
12 755 GY/VT F10DR
22 5985 VT/YE
X4 25 BTM 4086 YE/BU
X2 17 BTM 5723 BU/GN
20 BTM 5719 BU/BK
X1 8 BTM 5720 BN/BK
22 1073 WH/BK 5V
15 1020 WH/VT
5 4 VT/YE
X3 6 3 VT/BK
X3 16 UEU 5737 GY/GN Driver Assistance Systems Schematics
X4 19 -JHD 7176 BU/YE Moveable Window Schematics
F49DR X7 22 AU3 7557 WH/YE
F49DR X1 23 157 GY
F10DR 3 6815 WH/BN
X7 19 156 GY
F10DR X2 5 7558 VT/GN
X1 14 328 GY/GN
Interior Lights Schematics
13 1932 GN/WH
X7 6 816 YE/WH
Shift Lock Control Schematics

5020956

# Description and Operation

## Body Control System Description and Operation

The body control system consists of the body control module (BCM), communications, and various input and outputs. Some inputs, outputs and messages require other modules to interact with the BCM. The BCM also has discrete input and output terminals to control the vehicle's body functions. The BCM is wired to the high speed GMLAN serial data bus, low speed GMLAN serial data bus and Multiple LIN buses and acts as a gateway between them.

### Power Mode Master

This vehicle body control module (BCM) functions as the power mode master (PMM). The ignition switch is a low current switch with multiple discrete ignition switch signals to the PMM for determining the power mode that will be sent over the serial data circuits to the other modules that need this information; the PMM will activate relays and other direct outputs of the PMM as needed. Refer to *Power Mode Description and Operation on page 6-1038* for a complete description of power mode functions.

### Gateway

The body control module (BCM) in this vehicle functions as a gateway or translator. The purpose of the gateway is to translate serial data messages between the GMLAN high speed bus and the GMLAN low speed bus for communication between the various modules. The gateway will interact with each network according to that network's transmission protocol.

All communication between the BCM and a scan tool is on the high speed GMLAN serial data circuits. A lost communication DTC typically is set in modules other than the module with a communication failure.

### Body Control

The various body control module (BCM) input and output circuits are illustrated in the corresponding functional areas on the BCM electrical schematics. Refer to the *Body Control System Schematics on page 6-20* for more detailed information.

## Data Link Communications Description and Operation

**Note:** This is an overview of different serial data buses used by GM devices to communicate with each others. Use *Data Communication Schematics on page 6-4* to find out which serial data buses are configured for a specific vehicle.

### Circuit Description

There are many components in a vehicle that rely on information from other sources, transmit information to other sources, or both. Serial data communication networks provide a reliable, cost effective, way for various components of the vehicle to “talk” to one another and share information.

GM uses a number of different communication buses to insure the timely and efficient exchange of information between devices. When compared to each other, some of these buses are different in nature as far as speed, signal characteristics, and behavior. An example of this is the High Speed GMLAN and Low Speed GMLAN buses.

On the other hand, when other buses are compared to each other they have similar characteristics and simply operate in parallel. In this case they are used to group together components which have high interaction. Examples are the High Speed GMLAN, Powertrain Expansion, and Chassis Expansion buses. This allows them to communicate with each other on a bus with reduced message congestion insuring faster and the more timely exchange of information than if all vehicle devices were on a single bus.

The majority of information that exists within a given network generally stays local; however some information will have to be shared on other networks. Control modules designated as Gateway’s perform the function of transferring information between the various buses. A Gateway module is connected to at least 2 buses and will interact with each network according to its message strategy and transmission models.

GMLAN provides the capability for a receiving device to monitor message transmissions from other devices in order to determine if messages of interest are not being received. The primary purpose is to allow reasonable default values to be substituted for the information no longer being received. Additionally, a device may set a Diagnostic Trouble Code to indicate that the device it is expecting information from is no longer communicating.

### High Speed GMLAN Circuit Description

A High Speed GMLAN Bus is used where data needs to be exchanged at a high enough rate to minimize the delay between the occurrence of a change in sensor value and the reception of this information by a control device using the information to adjust vehicle system performance.

The High Speed GMLAN serial data network consists of two twisted wires. One signal circuit is identified as GMLAN-High and the other signal circuit is identified as GMLAN-Low. At each end of the data bus there is a 120 Ω termination resistor between the GMLAN-High and GMLAN-Low circuits.

Data symbols (1’s and 0’s) are transmitted sequentially at a rate of 500 Kbit/s. The data to be transmitted over the bus is represented by the voltage difference between the GMLAN-High signal voltage and the GMLAN-Low signal voltage.

When the two wire bus is at rest the GMLAN-High and GMLAN-Low signal circuits are not being driven and this represents a logic “1”. In this state both signal circuits are at the same voltage of 2.5 V. The differential voltage is approximately 0 V.

When a logic “0” is to be transmitted, the GMLAN-High signal circuit is driven higher to about 3.5 V and the GMLAN-Low circuit is driven lower to about 1.5 V. The differential voltage becomes approximately 2.0 (+/- 0.5) V.

## Chassis High Speed GMLAN Circuit Description

The GMLAN Chassis Expansion Bus is basically a copy of the High Speed GMLAN Bus except that its use is reserved for chassis components. This implementation splits message congestion between two parallel buses helping to insure timely message transmission and reception. Sometimes communication is required between the Chassis Expansion Bus and the primary High Speed GMLAN Bus. This is accomplished by using the K17 Electronic Brake Control Module (EBCM) as the Gateway module. Since the High Speed GMLAN Chassis Expansion Bus and primary High Speed GMLAN Bus operate in the same manner, the diagnostics for each are similar.

## Powertrain High Speed GMLAN Circuit Description

The GMLAN Powertrain Expansion Bus is basically a copy of the High Speed GMLAN Bus except that its use is reserved for Powertrain components. The bus is optional based upon feature content. Sometimes communication is required between the Powertrain Expansion Bus and the primary High Speed GMLAN Bus. This is accomplished by using the K20 Engine Control Module (ECM) as the Gateway module. Since the High Speed GMLAN Powertrain Expansion Bus and the primary High Speed GMLAN Bus operate in the same manner, the diagnostics for each are similar.

## Media Oriented Systems Transport (MOST) Circuit Description

The MOST Infotainment network is a dedicated high speed multimedia streaming data bus independent from GMLAN. The MOST bus will be configured in a physical hardwired loop with each device within the bus sends and receives data on an assigned MOST addresses in a set order. Each device on the MOST bus will be required to have twisted pair copper wires (2 transmit TX, 2 receive RX, and 1 electronic control line which is a 12 V wakeup signal line). The A11 Radio is the MOST Master and will monitor the bus for vehicle configuration, Infotainment data messages and errors on the bus. The MOST initialization consists of a short 100 ms low voltage pulse on the electronic control line (or MOST control line) connected to all devices contained on the MOST ring. This wakeup message once received by each device, will first respond with a generic device response. Once these initial responses on the MOST bus are reported successfully without error to the A11 Radio, the second data request will record the MOST device addresses, their functionality requirements and capabilities within. The A11 Radio will learn this information and also record the address node sequence on the MOST bus at this point. This node address list will now be stored within the A11 Radio as the MOST bus configuration (called “Last Working MOST ID of Node 1 – 9” on scan tool data display).

When MOST receive, transmit, or control line faults are detected, transmit/receive messages will not received as expected from the wakeup request. The A11 Radio and the K74 Human Machine Interface Control Module will then perform diagnostics to isolate these MOST faults. If the MOST control line is shorted low to 0 V for excess amount of time, the A11 Radio will set a U2098 DTC and K74 Human Machine Interface Control Module will set a U0029 02 DTC. At this point the MOST bus will be unable to communicate until the shorted MOST control line is repaired.

Once the shorted MOST control line diagnostics pass, the A11 Radio will attempt to resend the initial short pulse attempts up to 3 times on the MOST control line. If the expected responses are not received, the A11 Radio continues into a failure mode setting a U0028 DTC and will continue on to send one 300 ms long pulse, which will enable the furthest upstream transmitting device to become the surrogate MOST Master in this MOST fault/diagnostic mode. When the A11 Radio receives this new MOST Master identity, the surrogate MOST master device can be identified based on scan tool data parameter “Surrogate MOST Master Node Upstream Position”. The scan tool should be used to determine the MOST bus configuration and direction by utilizing the “Last Working MOST ID of Node 1 – 9” parameters from the A11 Radio data display. When a fault is present, it will indicate the newly enabled “Surrogate MOST Master Node Upstream Position” from the A11 Radio. This will assist in determining where the MOST bus/control is at fault. The MOST device upstream from the surrogate MOST master device, transmit, receive, or control lines will be the suspect areas for diagnostics at this point. These faults can be associated with any of the MOST transmit, receive, or control line twisted copper wires or possibly an internal device fault.

The K74 Human Machine Interface Control Module will set a U0029 00 DTC when it diagnoses a MOST bus not communicating properly after one attempt. When the DTC U0029 00 is set by the K74 Human Machine Interface Control Module without the corresponding DTC U0028 from the A11 Radio, it will be an indication of an intermittent wiring/device condition.

## Low Speed GMLAN Circuit Description

Low Speed GMLAN Bus is used in applications where a high data rate is not required which allows for the use of less complex components. It is typically used for operator controlled functions where the response time requirements are slower than those required for dynamic vehicle control.

The Low Speed GMLAN Serial Data Network consists of a single wire, ground referenced bus with high side voltage drive. During on road vehicle operation data symbols (1’s and 0’s) are transmitted sequentially at the normal rate of 33.3 Kbit/s. For component programming only, a special high speed data mode of 83.3 Kbit/s may be used.

Unlike the high speed dual wire networks, the single wire low speed network does not use terminating resistors at either end of the network.

The data symbols to be transmitted over the bus are represented by different voltage signals on the bus. When the Low Speed GMLAN Bus is at rest and is not being driven, there is a low signal voltage of approximately 0.2 V. This represents a logic “1”. When a logic “0” is to be transmitted, the signal voltage is driven higher to around 4.0 V or higher.

## Local Interconnect Network (LIN) Circuit Description

The Local Interconnect Network (LIN) Bus consists of a single wire with a transmission rate of 10.417 Kbit/s. This bus is used to exchange information between a master control module and other smart devices which provide supporting functionality. This type of configuration does not require the capacity or speed of either a High Speed GMLAN Bus or Low Speed GMLAN Bus and is thus relatively simpler.

The data symbols (1’s and 0’s) to be transmitted are represented by different voltage levels on the communication bus. When the LIN Bus is at rest and is not being driven, the signal is in a high voltage state of approximately Vbatt. This represents a logic “1”. When a logic “0” is to be transmitted, the signal voltage is driven low to about ground (0.0 V).

## Communication Enable Circuit Description

Devices on High Speed GMLAN Bus enable or disable communication based on the voltage level of the communication enable circuit. When the circuit voltage is high (around 12 V), communications are enabled. When the circuit is low, communications are disabled.

## Data Link Connector (DLC)

The X84 Data Link Connector (DLC) is a standardized 16-cavity connector. Connector design and location is dictated by an industry wide standard, and is required to provide the following:

- Terminal 1 Low speed GMLAN communications terminal
- Terminal 4 Scan tool power ground terminal
- Terminal 5 Common signal ground terminal
- Terminal 6 High speed GMLAN serial data bus (+) terminal
- Terminal 12 Chassis high speed GMLAN serial bus (+) terminal
- Terminal 13 Chassis high speed GMLAN serial bus (-) terminal
- Terminal 14 High speed GMLAN serial data bus (-) terminal
- Terminal 16 Scan tool power, battery positive voltage terminal

## Serial Data Reference

The scan tool communicates over the various buses on the vehicle. When a scan tool is installed on a vehicle, the scan tool will try to communicate with every device that could be optioned into the vehicle. If an option is not installed on the vehicle, the scan tool will display No Comm (or Not Connected) for that optional device. In order to avert misdiagnoses of No Communication with a specific device, refer to Data Link References for a list of devices and the buses they communicate with. Use schematics and specific vehicle build RPO codes to determine optional devices.

## Serial Data Gateway Module Description and Operation

The K56 Serial Data Gateway Module is used to handle communications between multiple GMLAN busses and functions as a gateway to isolate the secure networks from the unsecured networks. It was created to mitigate bus loading to support cyber security and new active/advanced safety features like Limited Ability Autonomous Driving and Enhanced Collision Avoidance (if equipped). The K56 Serial Data Gateway Module is used as a frame-to-frame gateway for all functional messages.

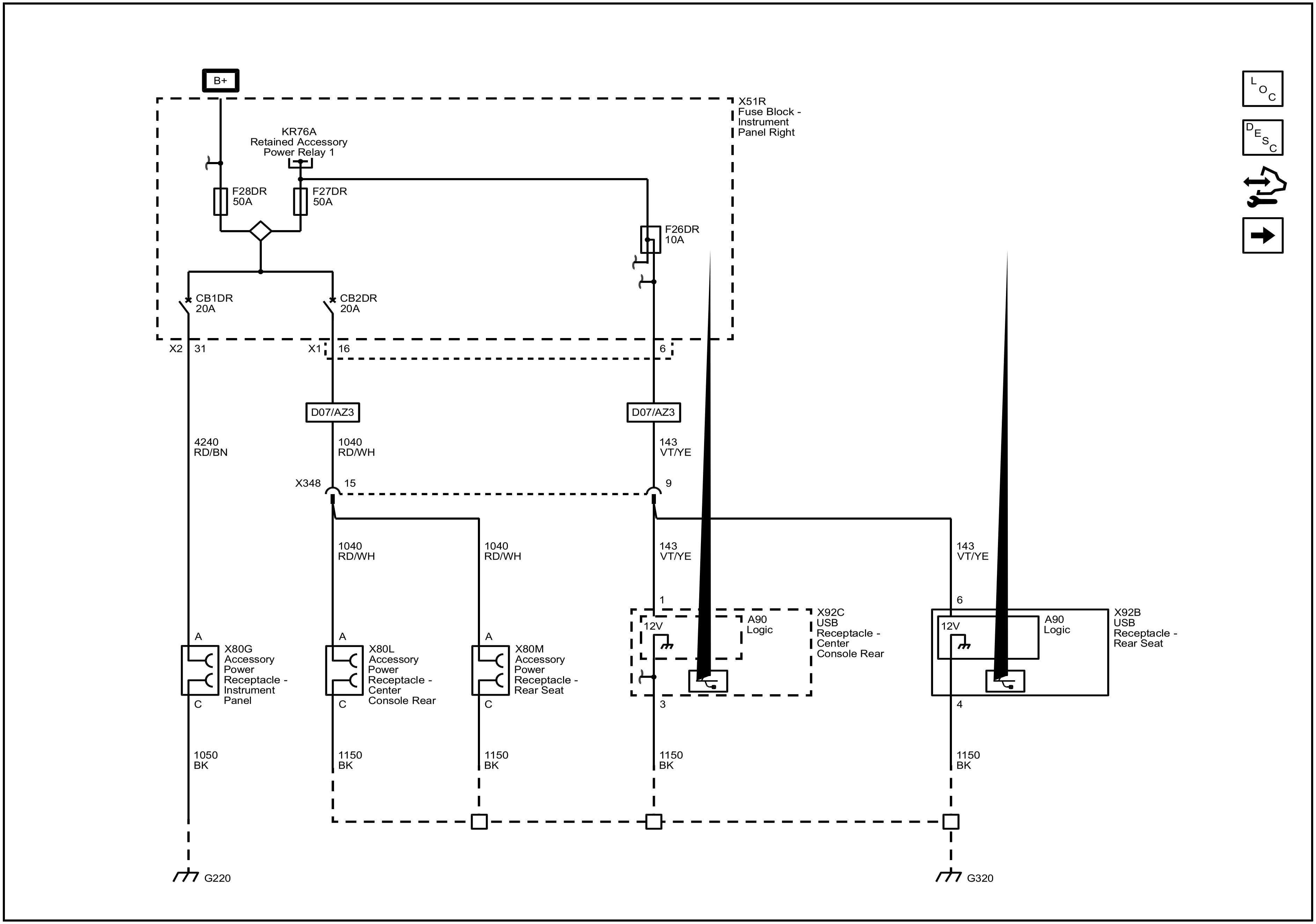
Depending on the vehicle contents, the K56 Serial Data Gateway Module is gating between primary High Speed GMLAN Bus, Gateway Expansion High Speed GMLAN Bus, Gateway Isolated High Speed GMLAN Bus, and Chassis High Speed GMLAN Bus. The K56 Serial Data Gateway Module is also gating between primary Low Speed GMLAN Bus and Gateway Isolated Low Speed GMLAN Bus.

Communication between the K56 Serial Data Gateway Module and a scan tool is done through the primary High Speed GMLAN Bus.

# Power Outlets

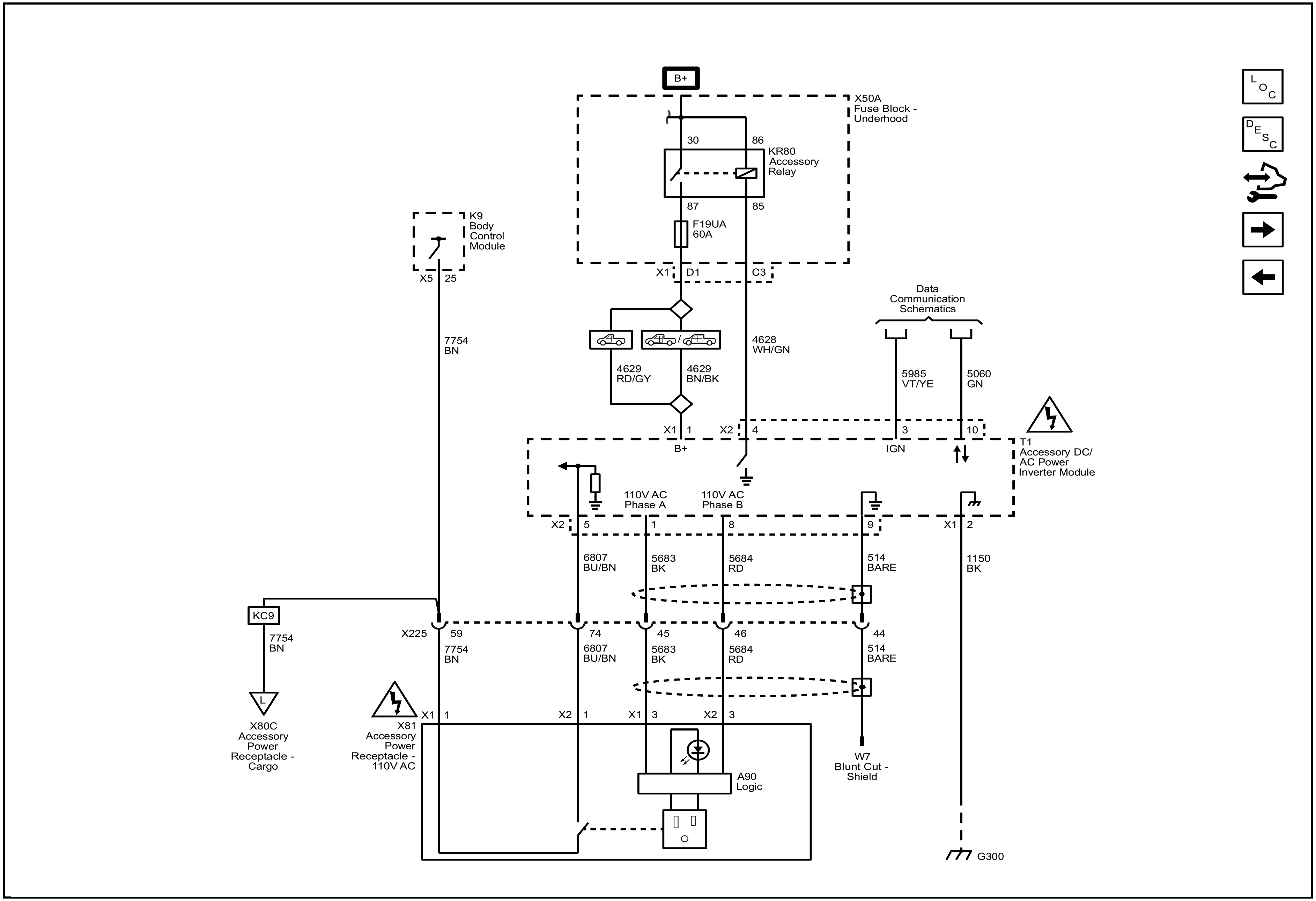
## Schematic and Routing Diagrams

## Cigar Lighter/Power Outlet Schematics (12V DC Power Outlets and USB Receptacles)


B+
X51R
Fuse Block - Instrument Panel Right
KR76A
Retained Accessory Power Relay 1
F28DR
50A
F27DR
50A
F26DR
10A
CB1DR
20A
CB2DR
20A
X2
31
X1
16
6
D07/AZ3
D07/AZ3
4240
RD/BN
1040
RD/WH
143
VT/YE
X348
15
9
1040
RD/WH
1040
RD/WH
143
VT/YE
143
VT/YE
A
C
X80G
Accessory Power Receptacle - Instrument Panel
X80L
Accessory Power Receptacle - Center Console Rear
X80M
Accessory Power Receptacle - Rear Seat
1
3
12V
A90
Logic
X92C
USB Receptacle - Center Console Rear
6
4
X92B
USB Receptacle - Rear Seat
1050
BK
1150
BK
G220
G320

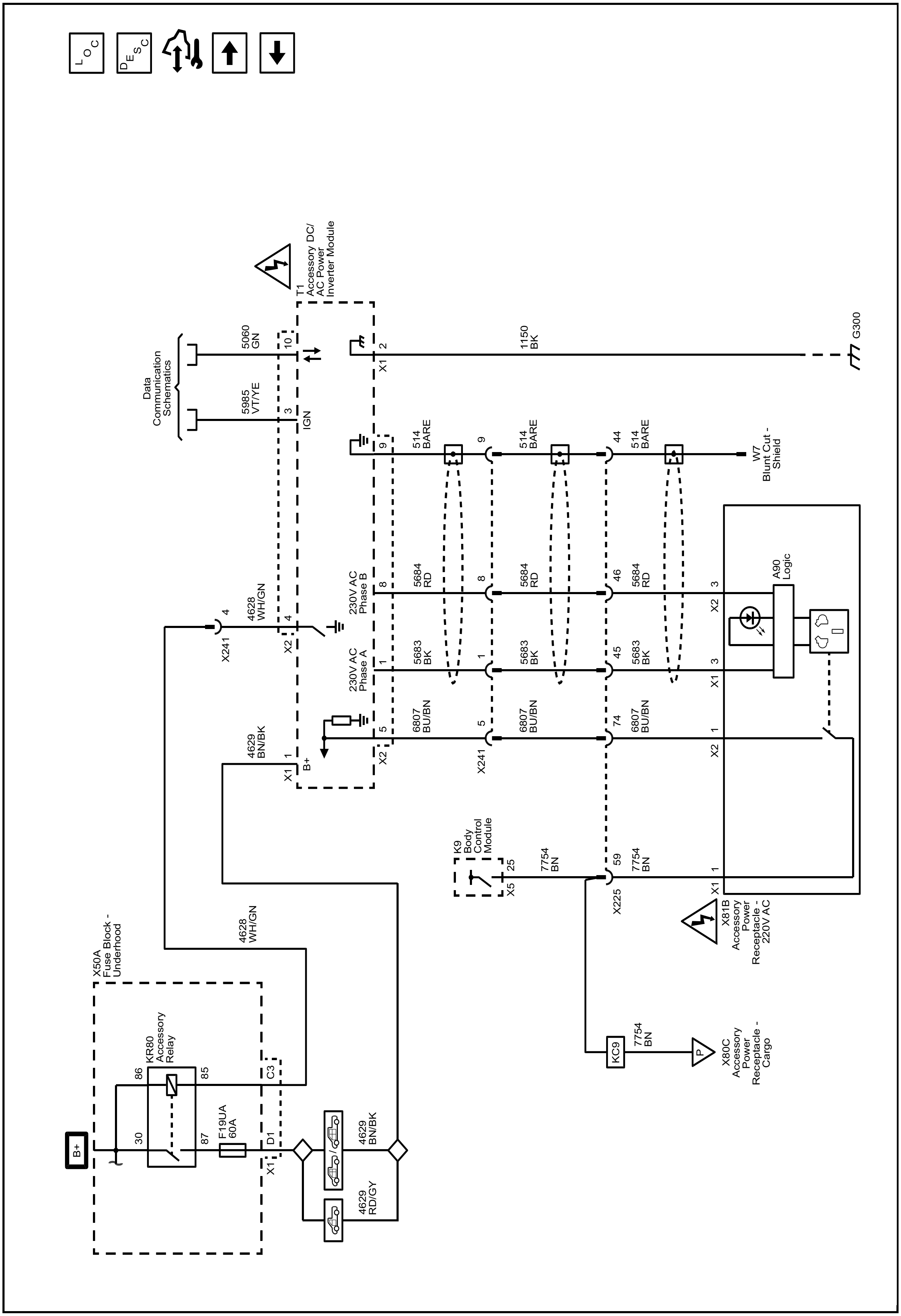
5020957

# Cigar Lighter/Power Outlet Schematics (Inverter Module and Instrument Panel Power Receptacle - 110V AC (KI4))

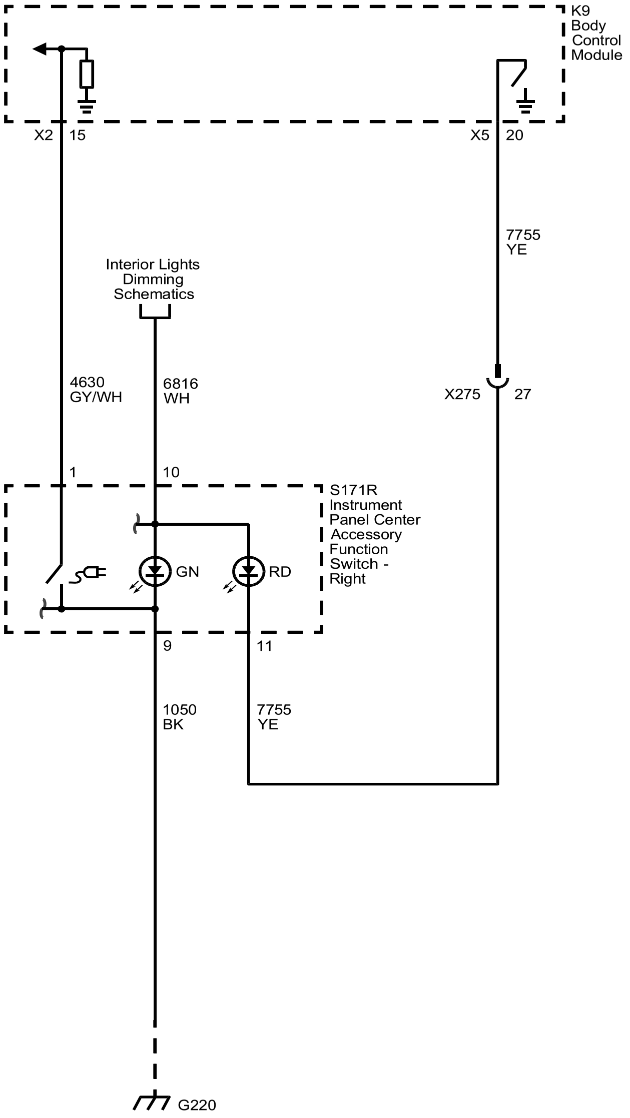

B+
X50A Fuse Block - Underhood
30
86
KR80 Accessory Relay
87
85
F19UA 60A
X1
D1
C3
K9 Body Control Module
X5
25
7754 BN
4629 RD/GY
4629 BN/BK
4628 WH/GN
Data Communication Schematics
5985 VT/YE
5060 GN
X1
1
X2
4
3
10
B+
IGN
T1 Accessory DC/ AC Power Inverter Module
110V AC Phase A
110V AC Phase B
X2
5
1
8
9
X1
2
6807 BU/BN
5683 BK
5684 RD
514 BARE
1150 BK
KC9
7754 BN
X225
59
7754 BN
74
6807 BU/BN
45
5683 BK
46
5684 RD
44
514 BARE
L
X80C Accessory Power Receptacle - Cargo
X81 Accessory Power Receptacle - 110V AC
X1
1
X2
1
X1
3
X2
3
A90 Logic
W7 Blunt Cut - Shield
G300

5020958

# Cigar Lighter/Power Outlet Schematics (Inverter Module and Instrument Panel Power Receptacle - 230V AC (KI5))

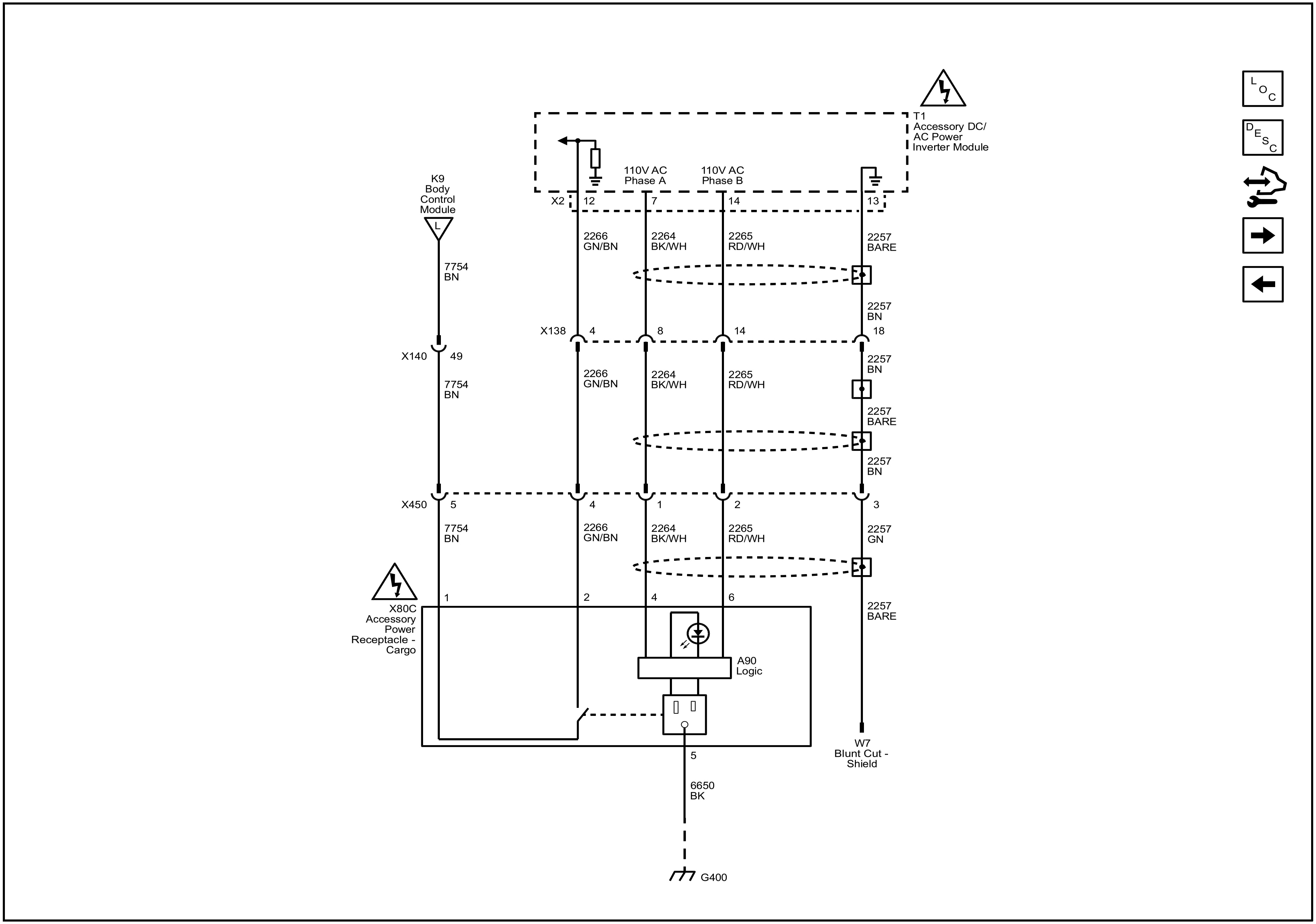

5020961
LOC
DESC
T1 Accessory DC/AC Power Inverter Module
Data Communication Schematics
5060 GN
10
5985 VT/YE
3
IGN
X1 2
1150 BK
G300
9
514 BARE
9
514 BARE
44
514 BARE
W7 Blunt Cut - Shield
230V AC Phase B
8
5684 RD
8
5684 RD
46
5684 RD
A90 Logic
X2 3
230V AC Phase A
1
5683 BK
1
5683 BK
45
5683 BK
X1 3
4628 WH/GN
4
X241
X2 4
5
6807 BU/BN
5
6807 BU/BN
74
6807 BU/BN
X2 1
4629 BN/BK
X1 1
B+
X2
X241
K9 Body Control Module
X5 25
7754 BN
59
7754 BN
X1 1
X225
X81B Accessory Power Receptacle - 220V AC
KC9
7754 BN
P
X80C Accessory Power Receptacle - Cargo
X50A Fuse Block - Underhood
KR80 Accessory Relay
86
85
30
87
F19UA 60A
C3
D1
X1
B+
4628 WH/GN
4629 BN/BK
4629 RD/GY

## Cigar Lighter/Power Outlet Schematics (Cargo Power Receptacle Controls and Indicators (KC9/KCA))

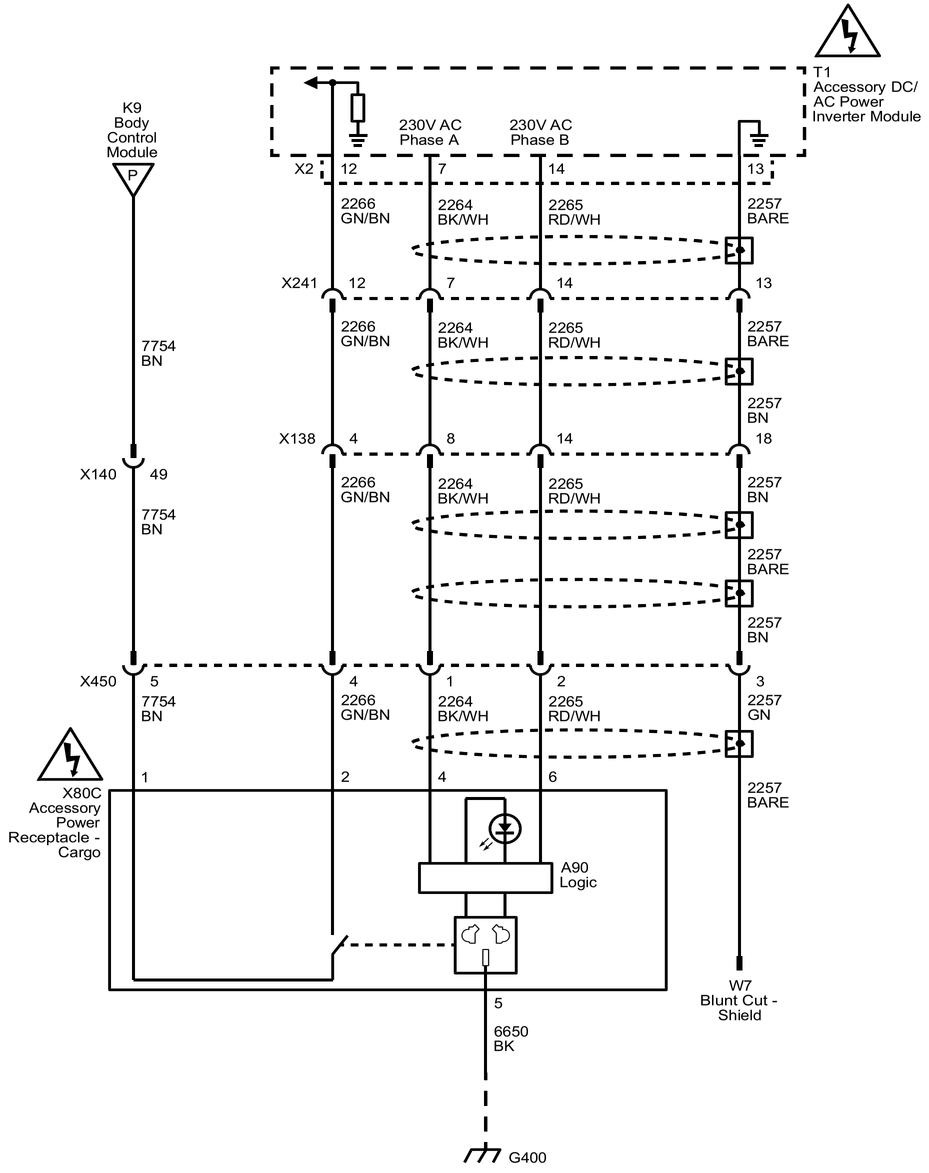

K9
Body
Control
Module
X2 15
X5 20
7755
YE
Interior Lights
Dimming
Schematics
4630
GY/WH
6816
WH
X275 27
1
10
S171R
Instrument
Panel Center
Accessory
Function
Switch -
Right
GN
RD
9
11
1050
BK
7755
YE
G220

5070131

## Cigar Lighter/Power Outlet Schematics (Cargo Power Receptacle - 110V AC (KC9))

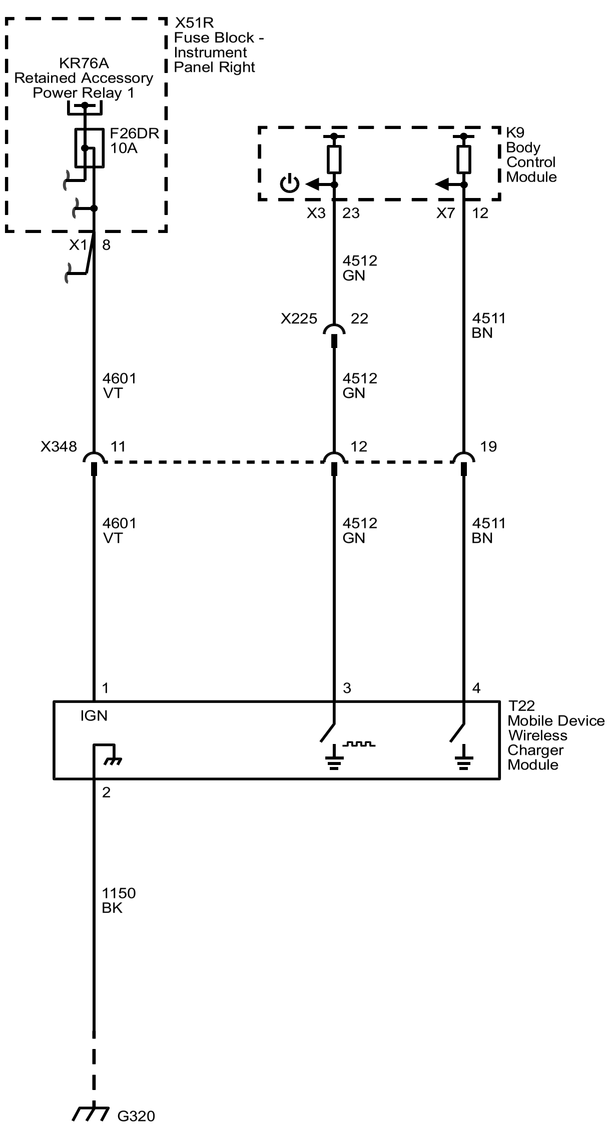

L O C
D E S C
T1
Accessory DC/
AC Power
Inverter Module
X2
12
7
14
13
110V AC
Phase A
110V AC
Phase B
K9
Body
Control
Module
L
7754
BN
2266
GN/BN
2264
BK/WH
2265
RD/WH
2257
BARE
2257
BN
X138
4
8
14
18
X140
49
2257
BN
2257
BARE
2257
BN
X450
5
4
1
2
3
2257
GN
X80C
Accessory
Power
Receptacle -
Cargo
1
2
4
6
2257
BARE
A90
Logic
W7
Blunt Cut -
Shield
5
6650
BK
G400
5020959

## Cigar Lighter/Power Outlet Schematics (Cargo Power Receptacle - 230V AC (KCA))


T1
Accessory DC/
AC Power
Inverter Module
K9
Body
Control
Module
P
230V AC
Phase A
230V AC
Phase B
X2
12
7
14
13
2266
GN/BN
2264
BK/WH
2265
RD/WH
2257
BARE
X241
12
7
14
13
7754
BN
2266
GN/BN
2264
BK/WH
2265
RD/WH
2257
BARE
2257
BN
X138
4
8
14
18
X140
49
7754
BN
2266
GN/BN
2264
BK/WH
2265
RD/WH
2257
BN
2257
BARE
2257
BN
X450
5
4
1
2
3
7754
BN
2266
GN/BN
2264
BK/WH
2265
RD/WH
2257
GN
2257
BARE
X80C
Accessory
Power
Receptacle -
Cargo
1
2
4
6
A90
Logic
5
6650
BK
G400
W7
Blunt Cut -
Shield

5020962

## Cigar Lighter/Power Outlet Schematics (Wireless Charging (K4C))


X51R
Fuse Block - Instrument Panel Right
KR76A
Retained Accessory Power Relay 1
F26DR
10A
X1
8
4601
VT
X348
11
4601
VT
K9
Body Control Module
X3
23
X7
12
4512
GN
X225
22
4512
GN
12
4512
GN
4511
BN
19
4511
BN
1
3
4
IGN
T22
Mobile Device Wireless Charger Module
2
1150
BK
G320

5020963

# Description and Operation

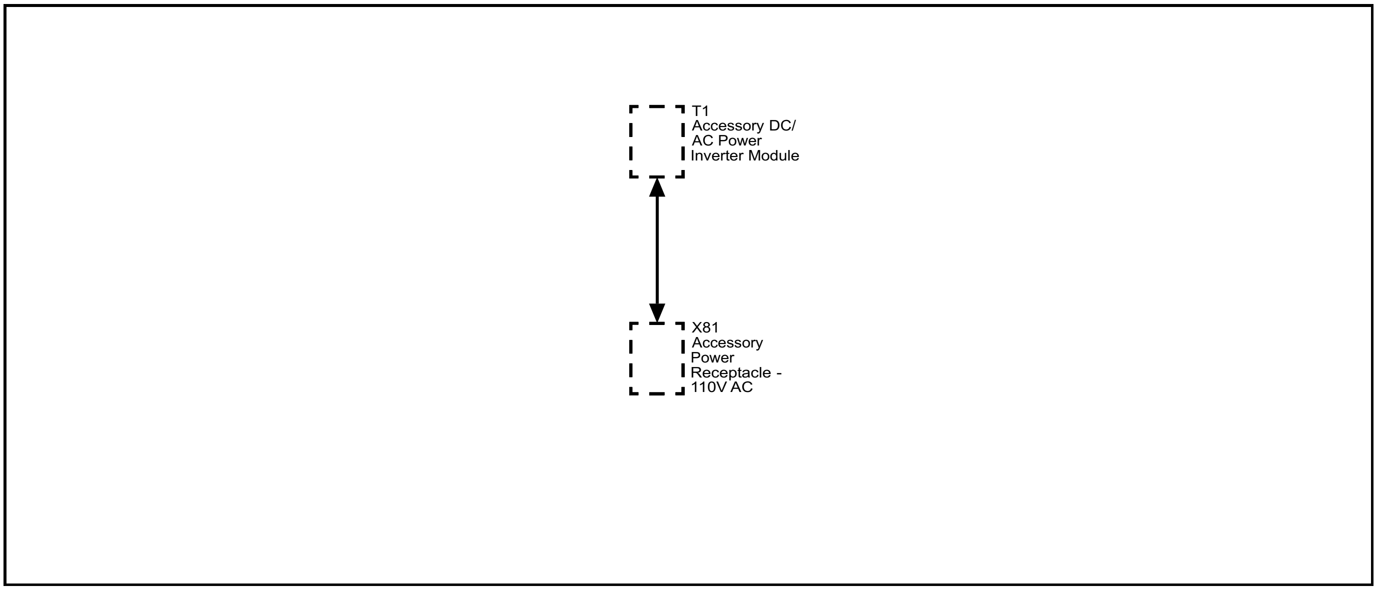
## Power Outlets Description and Operation

### 12 Volt Power Outlet Receptacle Description and Operation

The vehicle is fitted with a 12 V accessory power receptacle. The accessory power receptacles are controlled by an ignition operated relay. The accessory power receptacles are operational when the ignition is turned to either the On or the Accessories positions. The X80J and X80K accessory power receptacles may be configured to be operational when the ignition is Off by changing the position of the 50A fuse from the F10DL position to the F11DL position in the left instrument panel fuse block.

### 110 Volt Power Outlet Receptacle System Description

**Power Outlets Block Diagram**


T1
Accessory DC/AC Power Inverter Module
X81
Accessory Power Receptacle - 110V AC
3403851

The alternating current (AC) accessory power outlet system consists of the accessory DC/AC power inverter module and the accessory power receptacle – 110 V AC. The accessory DC/AC power inverter module converts 12 V direct current (DC) battery power to 110 V at 60 Hertz (Hz) AC power to operate AC powered devices. The accessory DC/AC power inverter module provides up to 150 watts of power. The accessory power receptacle – 110 V AC provides the usual connection for AC powered devices.

### 110 Volt Power Outlet Receptacle System Operation

The accessory DC/AC power inverter module receives fuse protected battery voltage and is connected to the 12 V electrical system ground. The accessory power receptacle – 110 V AC has an internal switch, that detects when an AC powered device is plugged into the outlet. When the ignition is ON, and an AC powered device is plugged into the accessory power receptacle – 110 V AC, the normally open switch in the accessory power receptacle – 110 V AC, closes. When the accessory DC/AC power inverter module detects the voltage from the accessory power receptacle – 110 V AC switch, the inverter module begins to supply 110 V AC to the accessory power receptacle – 110 V AC after a 1.5 s delay. The accessory AC power system is protected against circuit overload and circuit shorts to ground.

### 110 Volt Power Outlet Receptacle Isolation Fault Protection

The accessory DC/AC power inverter module contains a ground fault circuit interrupter (GFCI). GFCI monitors the 110 V circuit for a short to vehicle chassis ground. If a 110 V AC short to ground is detected, the accessory DC/AC power inverter module will turn OFF. The module remains OFF, until the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 s delay.

## 110 Volt Power Outlet Receptacle Overload Shutdown

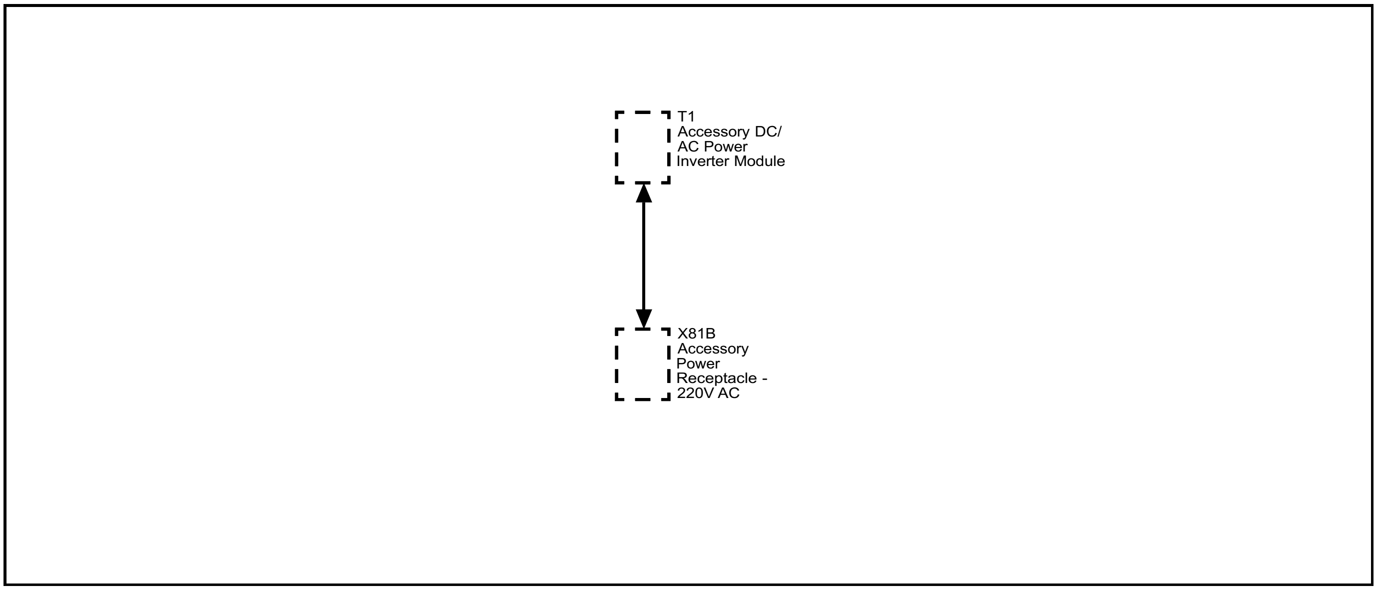
The accessory DC/AC power inverter module will turn OFF if the current in the 110 V circuit is greater than 3.8 A for 1 s , or 2.5 A for 10 s . The module will turn ON again, when the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 s delay.

## 110 Volt Power Outlet Receptacle Internal Shutdown

The accessory DC/AC power inverter module will turn OFF if the B+ supply voltage is greater than 16.5 V or less than 11 V. The module will also turn OFF if the device temperature is greater than 85°C (185°F). The module will turn ON again, after the shutdown condition is corrected, and the AC powered device is unplugged from the outlet, and then plugged into the outlet.

## 230 Volt Power Outlet Receptacle System Description

### Power Outlets Block Diagram



The alternating current (AC) accessory power outlet system consists of the accessory DC/AC power inverter module and the accessory power receptacle – 220V AC. The accessory DC/AC power inverter module converts 12 V direct current (DC) battery power to 220–230 V at 50 Hertz (Hz) AC power to operate AC powered devices. The accessory DC/AC power inverter module provides up to 150 watts of power. The accessory power receptacle – 220V AC provides the usual connection for AC powered devices.

## 230 Volt Power Outlet Receptacle System Operation

The accessory DC/AC power inverter module receives fuse protected battery voltage and is connected to the 12 V electrical system ground. The accessory power receptacle – 220V AC has an internal switch, that detects when an AC powered device is plugged into the outlet. When the ignition is ON, and an AC powered device is plugged into the accessory power receptacle – 220V AC, the normally open switch in the accessory power receptacle – 220V AC, closes. When the accessory DC/AC power inverter module detects the voltage from the accessory power receptacle – 220V AC switch, the inverter module begins to supply 220–230 V AC to the accessory power receptacle – 220V AC after a 1.5 second delay. The accessory AC power system is protected against circuit overload and circuit shorts to ground.

## 230 Volt Power Outlet Receptacle Isolation Fault Protection

The accessory DC/AC power inverter module contains a ground fault circuit interrupter (GFCI). GFCI monitors the 230 V circuit for a short to vehicle chassis ground. If a 230 V AC short to ground is detected, the accessory DC/AC power inverter module will turn OFF. The module remains OFF, until the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 s delay.

## 230 Volt Power Outlet Receptacle Overload Shutdown

The accessory AC/DC power control module will turn OFF if the current in the 230 V circuit is greater than 3.8 A for 1 second, or 2.5 A for 10 seconds. The module will turn ON again, when the AC powered device is unplugged from the outlet, and then plugged into the outlet after a 3 second delay.

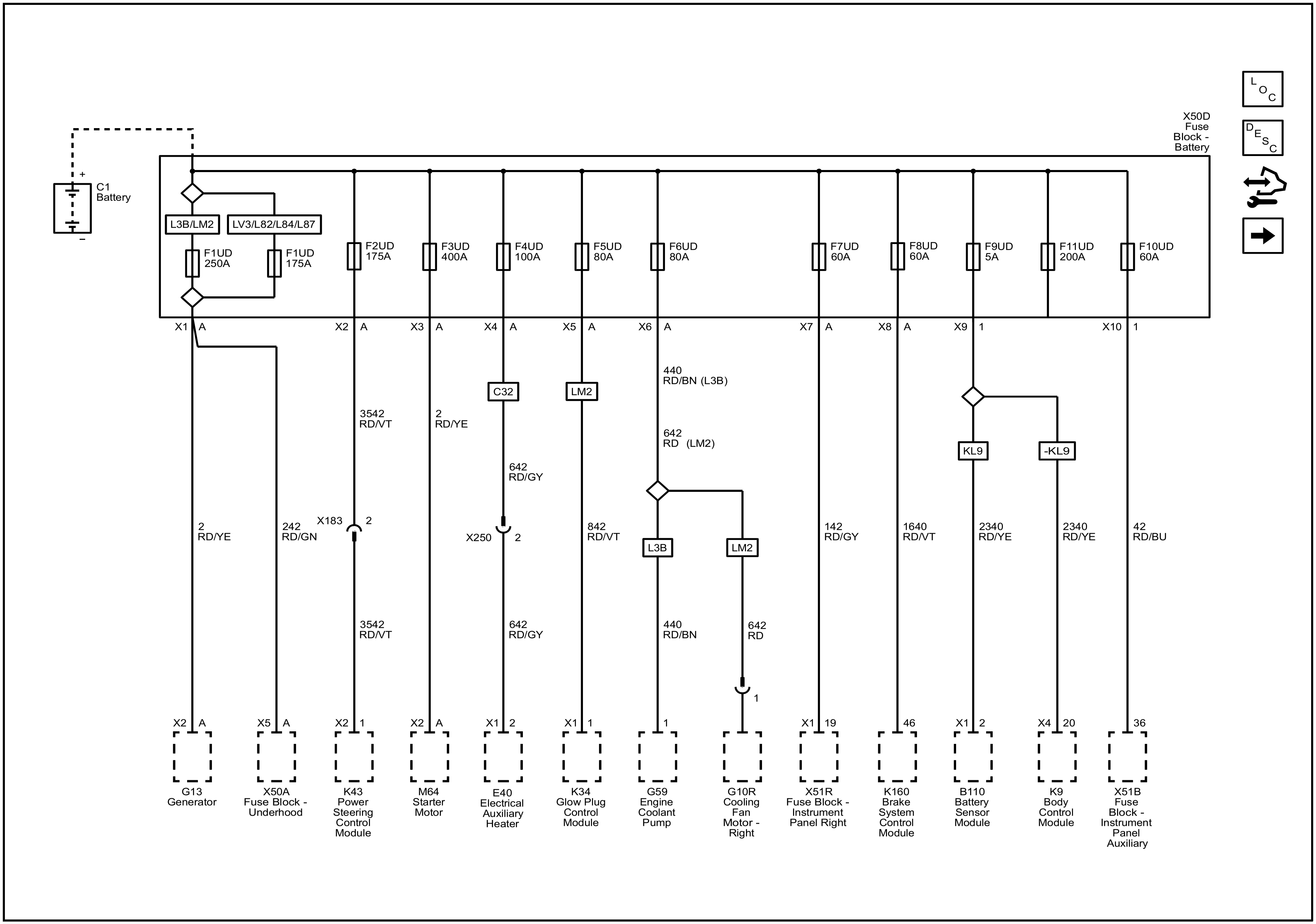
## 230 Volt Power Outlet Receptacle Internal Shutdown

The accessory DC/AC power inverter module will turn OFF if the B+ supply voltage is greater than 16.5 V or less than 11 V. The module will also turn OFF if the device temperature is greater than 85°C (185°F). The module will turn ON again, after the shutdown condition is corrected, and the AC powered device is unplugged from the accessory power receptacle – 220V AC, and then plugged into the accessory power receptacle – 220V AC.

# Wiring Systems and Power Management

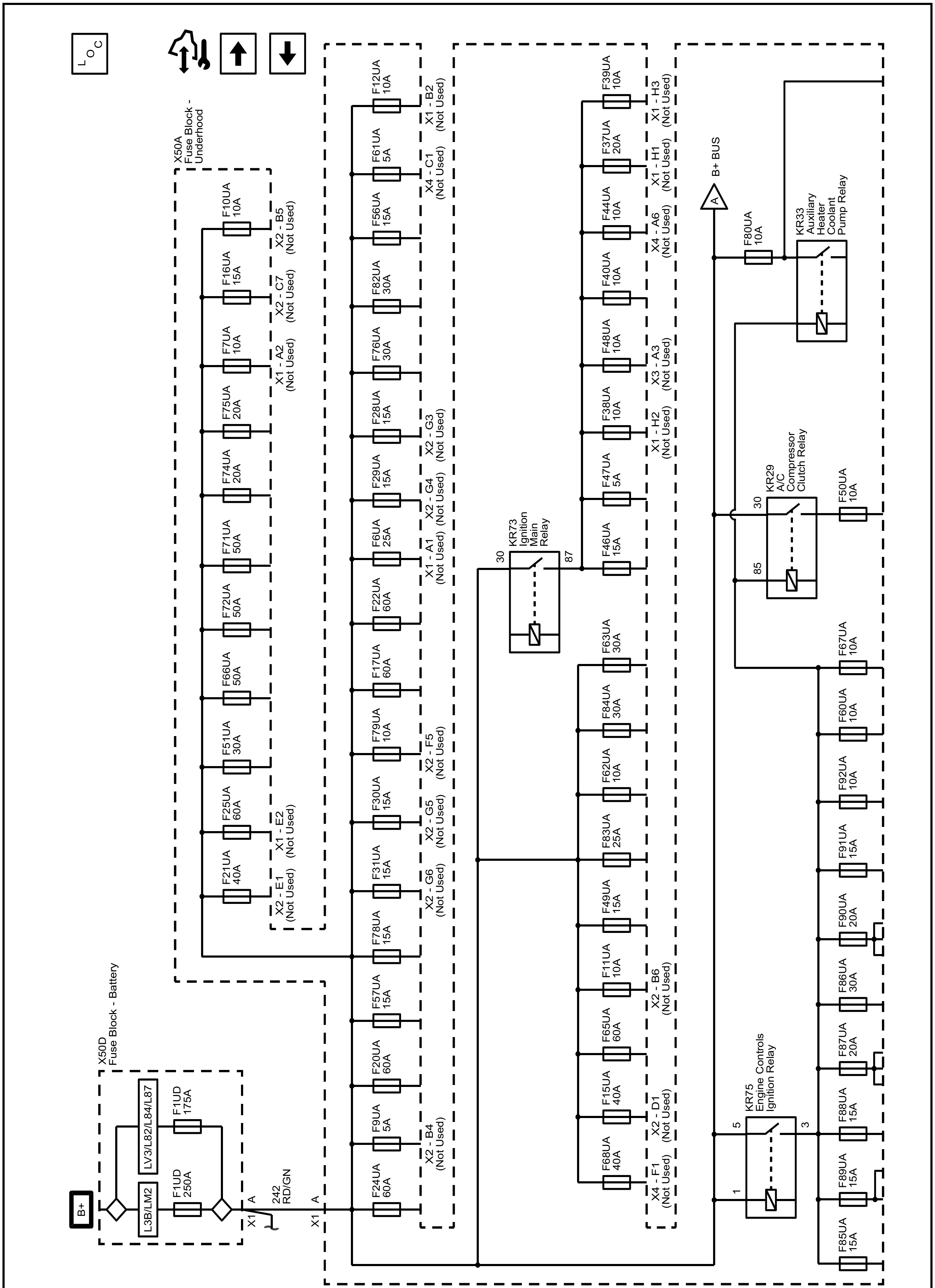
## Schematic and Routing Diagrams

# Power Distribution Schematics (X50D Battery Fuse Block)

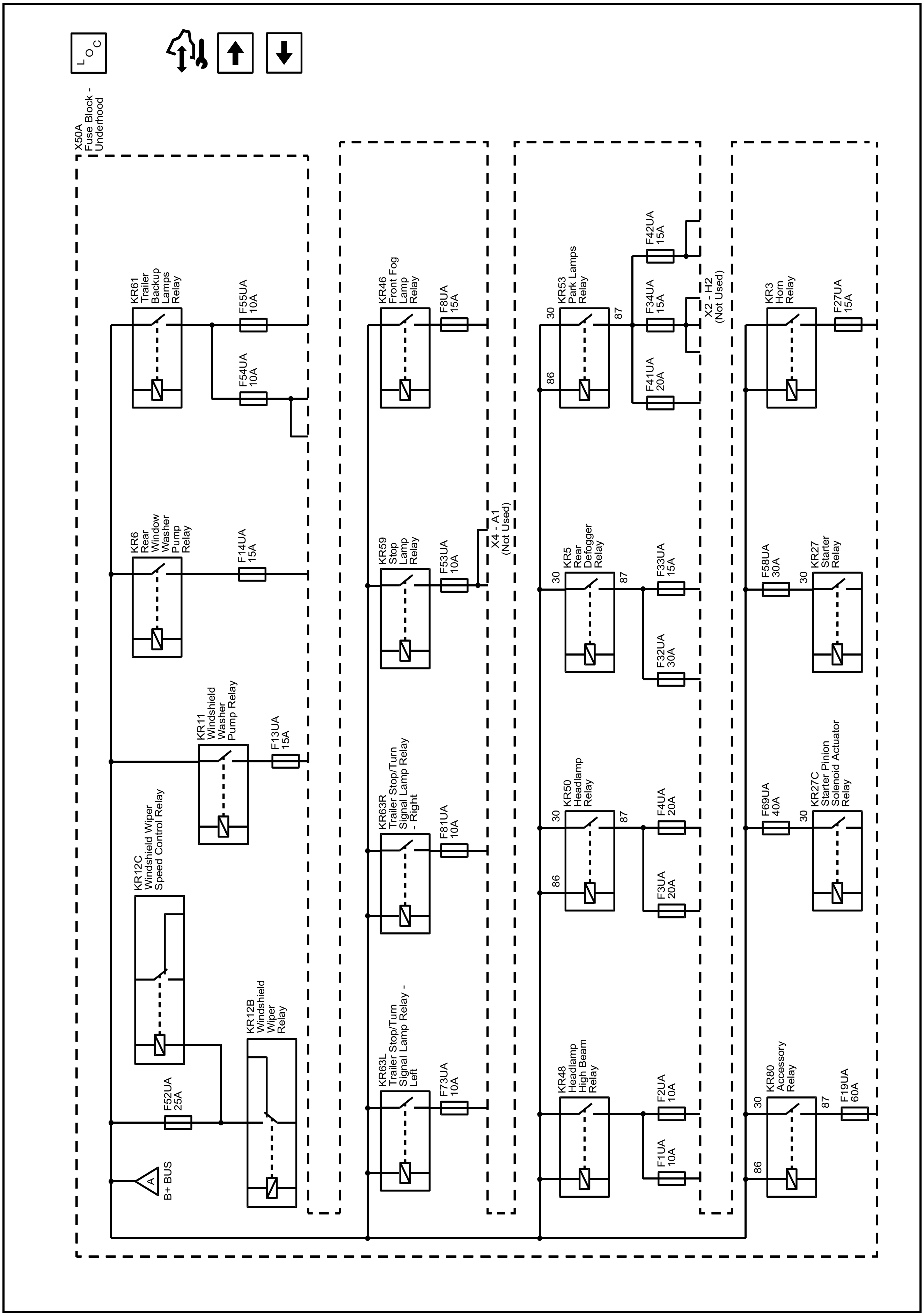

LOC
DESC
X50D
Fuse
Block -
Battery
C1
Battery
+
–
L3B/LM2
LV3/L82/L84/L87
F1UD
250A
F1UD
175A
F2UD
175A
F3UD
400A
F4UD
100A
F5UD
80A
F6UD
80A
F7UD
60A
F8UD
60A
F9UD
5A
F11UD
200A
F10UD
60A
X1 A
X2 A
X3 A
X4 A
X5 A
X6 A
X7 A
X8 A
X9 1
X10 1
2
RD/YE
242
RD/GN
3542
RD/VT
X183 2
2
RD/YE
C32
642
RD/GY
X250 2
LM2
842
RD/VT
440
RD/BN (L3B)
642
RD (LM2)
L3B
LM2
440
RD/BN
642
RD
1
142
RD/GY
1640
RD/VT
KL9
-KL9
2340
RD/YE
2340
RD/YE
42
RD/BU
X2 A
X5 A
X2 1
X2 A
X1 2
X1 1
1
X1 19
46
X1 2
X4 20
36
G13
Generator
X50A
Fuse Block -
Underhood
K43
Power
Steering
Control
Module
M64
Starter
Motor
E40
Electrical
Auxiliary
Heater
K34
Glow Plug
Control
Module
G59
Engine
Coolant
Pump
G10R
Cooling
Fan
Motor -
Right
X51R
Fuse Block -
Instrument
Panel Right
K160
Brake
System
Control
Module
B110
Battery
Sensor
Module
K9
Body
Control
Module
X51B
Fuse
Block -
Instrument
Panel
Auxiliary

4937716

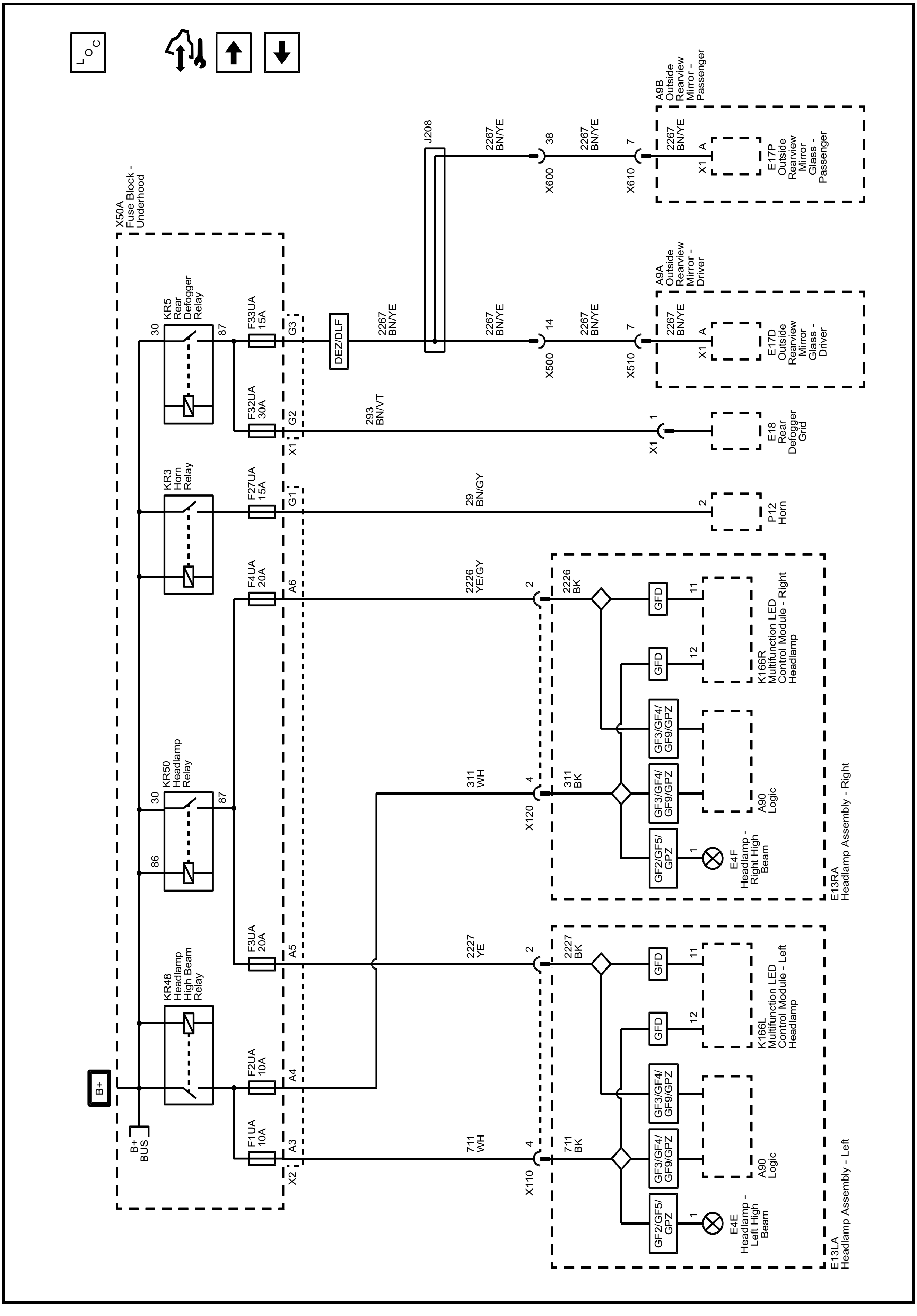
## Power Distribution Schematics (X50A Underhood Fuse Block Bussing (1 of 2))


4937717
LOC
B+
X50D
Fuse Block - Battery
L3B/LM2
LV3/L82/L84/L87
F1UD
250A
F1UD
175A
X1
A
242
RD/GN
X1
A
X50A
Fuse Block - Underhood
F10UA 10A
X2 - B5 (Not Used)
F16UA 15A
X2 - C7 (Not Used)
F7UA 10A
X1 - A2 (Not Used)
F75UA 20A
F74UA 20A
F71UA 50A
F72UA 50A
F66UA 50A
F51UA 30A
F25UA 60A
X1 - E2 (Not Used)
F21UA 40A
X2 - E1 (Not Used)
F12UA 10A
X1 - B2 (Not Used)
F61UA 5A
X4 - C1 (Not Used)
F56UA 15A
F82UA 30A
F76UA 30A
F28UA 15A
X2 - G3 (Not Used)
F29UA 15A
X2 - G4 (Not Used)
F6UA 25A
X1 - A1 (Not Used)
F22UA 60A
F17UA 60A
F79UA 10A
X2 - F5 (Not Used)
F30UA 15A
X2 - G5 (Not Used)
F31UA 15A
X2 - G6 (Not Used)
F78UA 15A
F57UA 15A
F20UA 60A
F9UA 5A
X2 - B4 (Not Used)
F24UA 60A
KR73 Ignition Main Relay
30
87
F39UA 10A
X1 - H3 (Not Used)
F37UA 20A
X1 - H1 (Not Used)
F44UA 10A
X4 - A6 (Not Used)
F40UA 10A
F48UA 10A
X3 - A3 (Not Used)
F38UA 10A
X1 - H2 (Not Used)
F47UA 5A
F46UA 15A
F63UA 30A
F84UA 30A
F62UA 10A
F83UA 25A
F49UA 15A
F11UA 10A
X2 - B6 (Not Used)
F65UA 60A
F15UA 40A
X2 - D1 (Not Used)
F68UA 40A
X4 - F1 (Not Used)
A
B+ BUS
F80UA 10A
KR33 Auxiliary Heater Coolant Pump Relay
KR29 A/C Compressor Clutch Relay
30
85
F50UA 10A
F67UA 10A
F60UA 10A
F92UA 10A
F91UA 15A
F90UA 20A
F86UA 30A
F87UA 20A
KR75 Engine Controls Ignition Relay
5
3
1
F88UA 15A
F89UA 15A
F85UA 15A

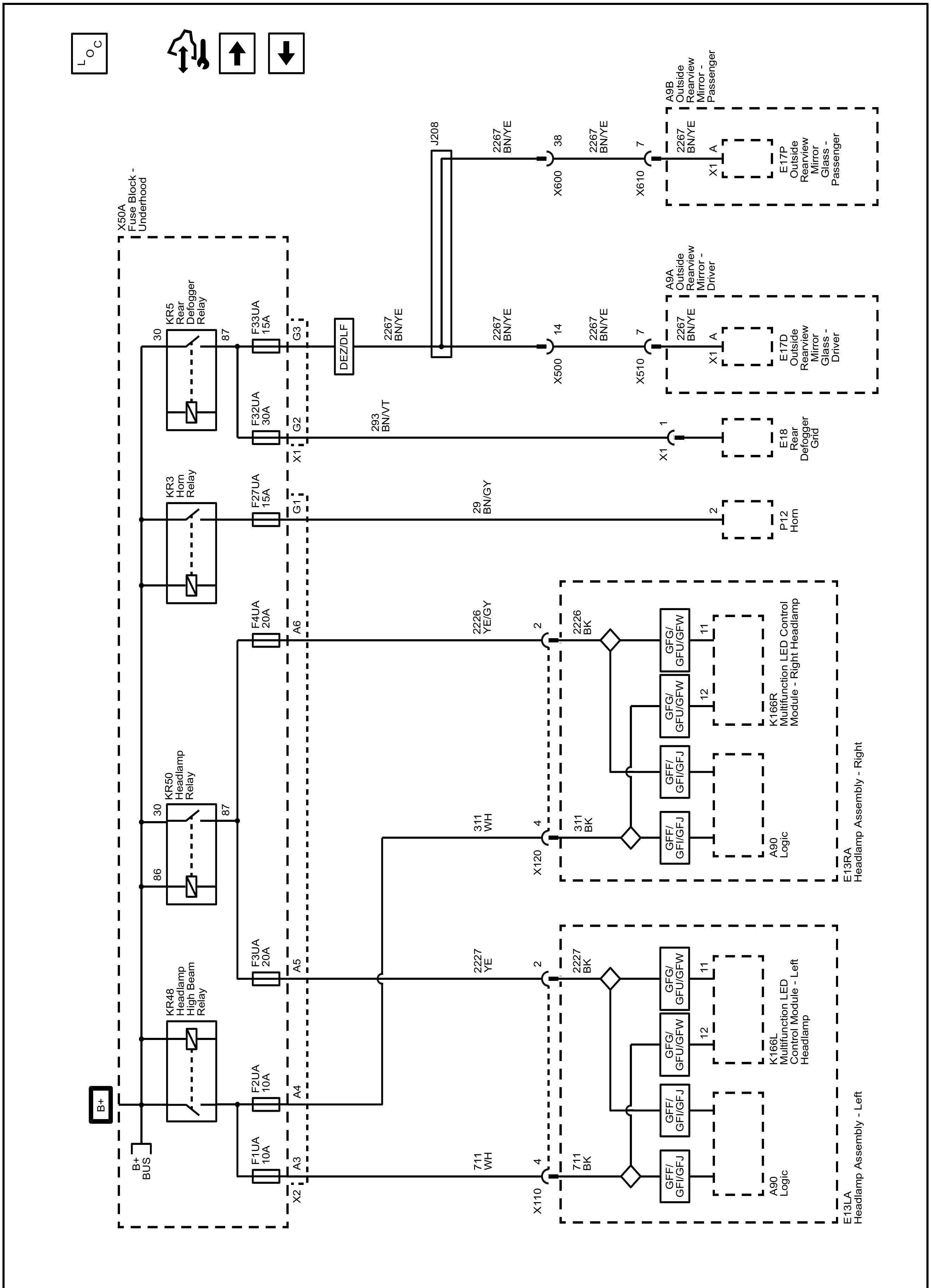
# Power Distribution Schematics (X50A Underhood Fuse Block Bussing (2 of 2))


4937719
X50A Fuse Block - Underhood
A
B+ BUS
F52UA 25A
KR12C Windshield Wiper Speed Control Relay
KR12B Windshield Wiper Relay
KR11 Windshield Washer Pump Relay
F13UA 15A
KR6 Rear Window Washer Pump Relay
F14UA 15A
KR61 Trailer Backup Lamps Relay
F55UA 10A
F54UA 10A
KR63L Trailer Stop/Turn Signal Lamp Relay - Left
F73UA 10A
KR63R Trailer Stop/Turn Signal Lamp Relay - Right
F81UA 10A
KR59 Stop Lamp Relay
F53UA 10A
X4 - A1 (Not Used)
KR46 Front Fog Lamp Relay
F8UA 15A
KR48 Headlamp High Beam Relay
F2UA 10A
F1UA 10A
KR50 Headlamp Relay
30
86
87
F4UA 20A
F3UA 20A
KR5 Rear Defogger Relay
30
87
F33UA 15A
F32UA 30A
KR53 Park Lamps Relay
30
86
87
F34UA 15A
F41UA 20A
F42UA 15A
X2 - H2 (Not Used)
KR80 Accessory Relay
30
86
87
F19UA 60A
F69UA 40A
30
KR27C Starter Pinion Solenoid Actuator Relay
F58UA 30A
30
KR27 Starter Relay
KR3 Horn Relay
F27UA 15A

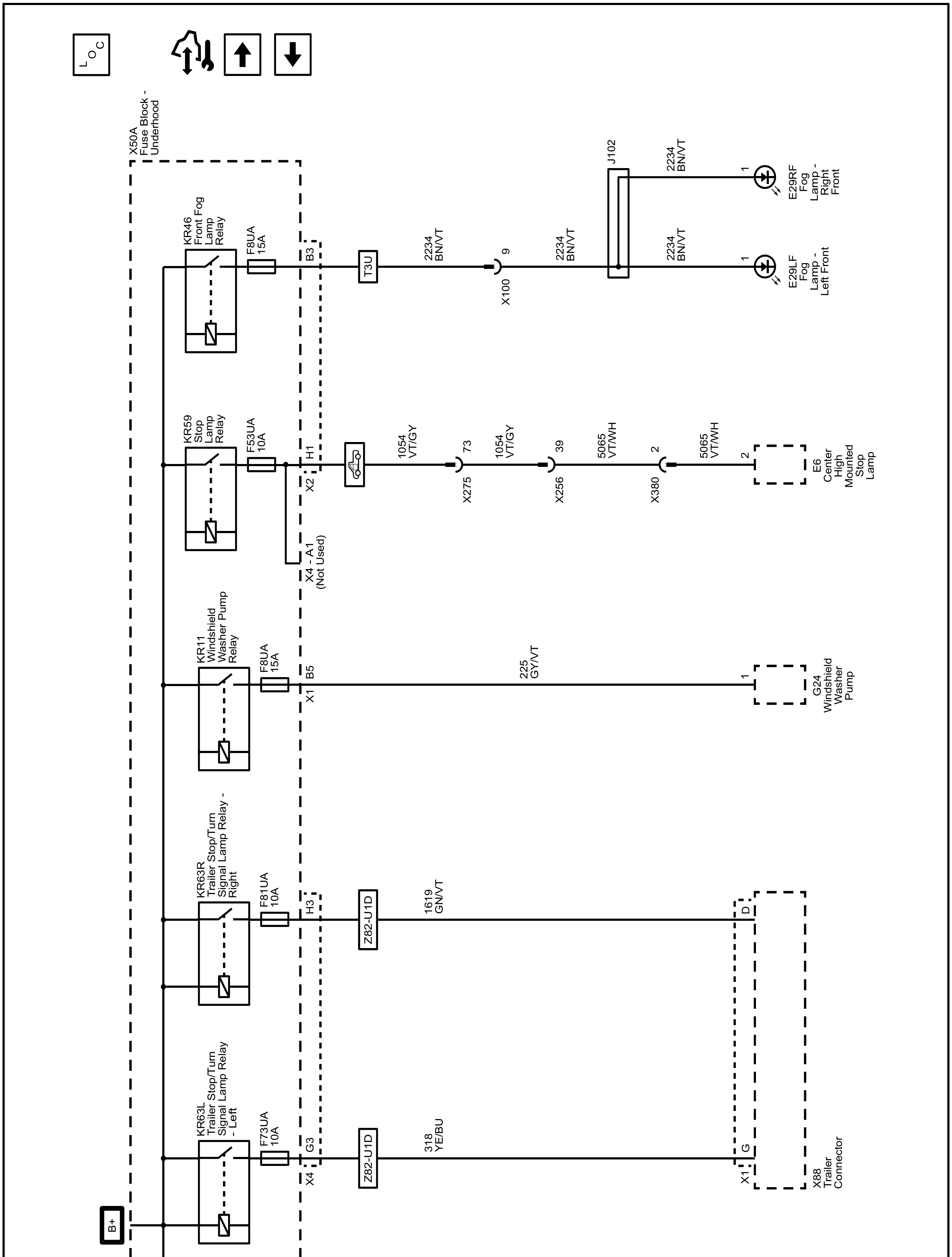
## Power Distribution Schematics (F1UA, F2UA, F3UA, F4UA, F27UA, F32UA, and F33UA Fuses (X88))


5043860
L O C
B+
B+ BUS
X50A Fuse Block - Underhood
KR48 Headlamp High Beam Relay
KR50 Headlamp Relay
KR3 Horn Relay
KR5 Rear Defogger Relay
30
86
87
F1UA 10A
F2UA 10A
F3UA 20A
F4UA 20A
F27UA 15A
F32UA 30A
F33UA 15A
X2
A3
A4
A5
A6
X1
G1
G2
G3
DEZ/DLF
J208
711 WH
311 WH
2227 YE
2226 YE/GY
29 BN/GY
293 BN/VT
2267 BN/YE
X110
X120
X500
X510
X600
X610
4
2
1
7
14
38
A
711 BK
311 BK
2227 BK
2226 BK
GFD
GF3/GF4/ GF9/GPZ
GF2/GF5/ GPZ
11
12
E4E Headlamp - Left High Beam
E4F Headlamp - Right High Beam
A90 Logic
K166L Multifunction LED Control Module - Left Headlamp
K166R Multifunction LED Control Module - Right Headlamp
E13LA Headlamp Assembly - Left
E13RA Headlamp Assembly - Right
P12 Horn
E18 Rear Defogger Grid
A9A Outside Rearview Mirror - Driver
E17D Outside Rearview Mirror Glass - Driver
A9B Outside Rearview Mirror - Passenger
E17P Outside Rearview Mirror Glass - Passenger

# Power Distribution Schematics (F1UA, F2UA, F3UA, F4UA, F27UA, F32UA, and F33UA Fuses (Z88))

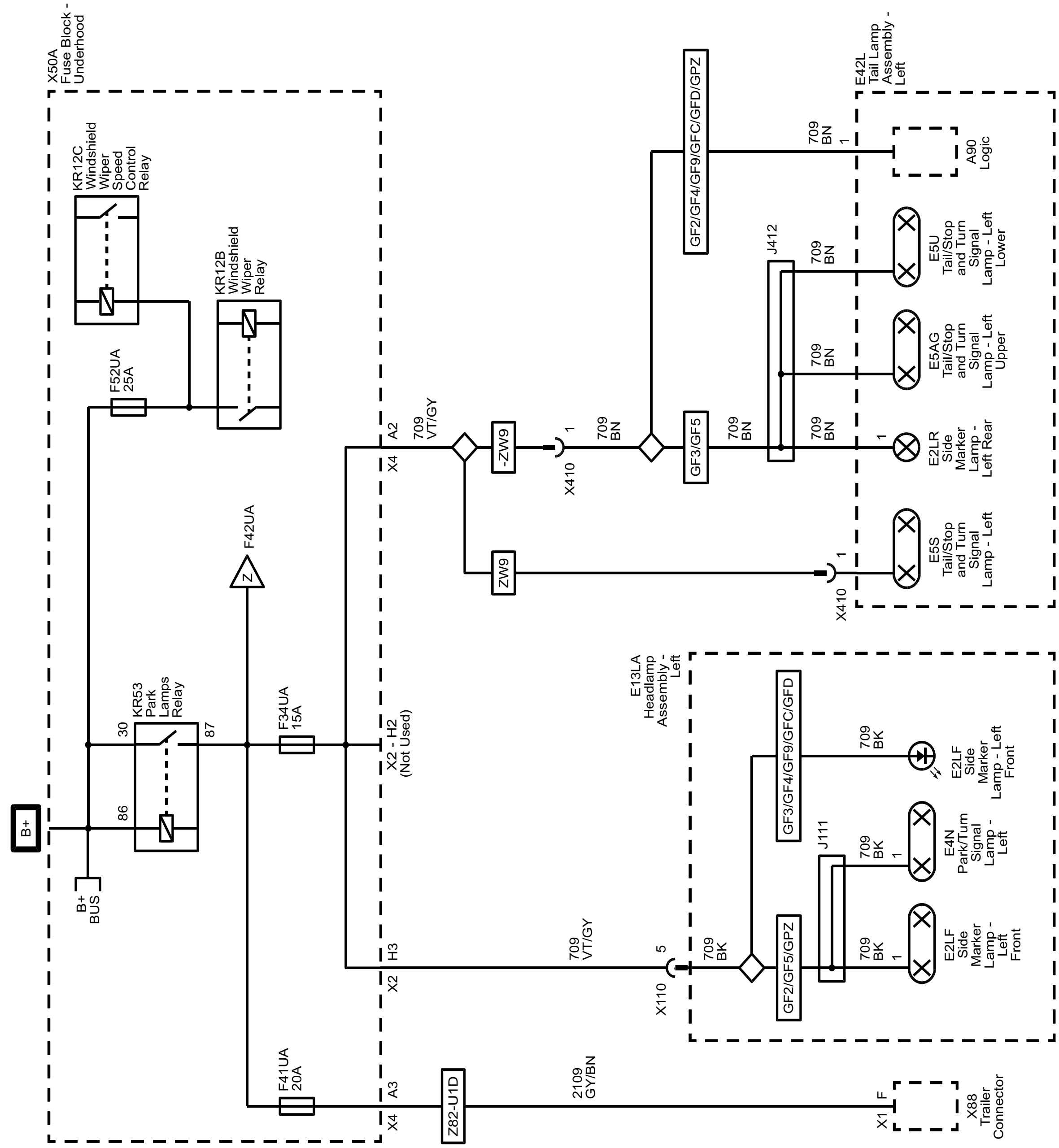

5083617
X50A Fuse Block - Underhood
B+
B+ BUS
KR48 Headlamp High Beam Relay
KR50 Headlamp Relay
KR3 Horn Relay
KR5 Rear Defogger Relay
30
86
87
F1UA 10A
F2UA 10A
F3UA 20A
F4UA 20A
F27UA 15A
F32UA 30A
F33UA 15A
X2
A3
A4
A5
A6
G1
X1
G2
G3
DEZ/DLF
J208
711 WH
2227 YE
311 WH
2226 YE/GY
29 BN/GY
293 BN/VT
2267 BN/YE
X110
X120
X500
X510
X600
X610
X1
2
4
14
38
7
1
A
711 BK
2227 BK
311 BK
2226 BK
GFF/ GFI/GFJ
GFG/ GFU/GFW
11
12
A90 Logic
K166L Multifunction LED Control Module - Left Headlamp
K166R Multifunction LED Control Module - Right Headlamp
E13LA Headlamp Assembly - Left
E13RA Headlamp Assembly - Right
P12 Horn
E18 Rear Defogger Grid
A9A Outside Rearview Mirror - Driver
E17D Outside Rearview Mirror Glass - Driver
A9B Outside Rearview Mirror - Passenger
E17P Outside Rearview Mirror Glass - Passenger
L O C

## Power Distribution Schematics (F8UA, F13UA, F53UA, F73UA, and F81UA Fuses)

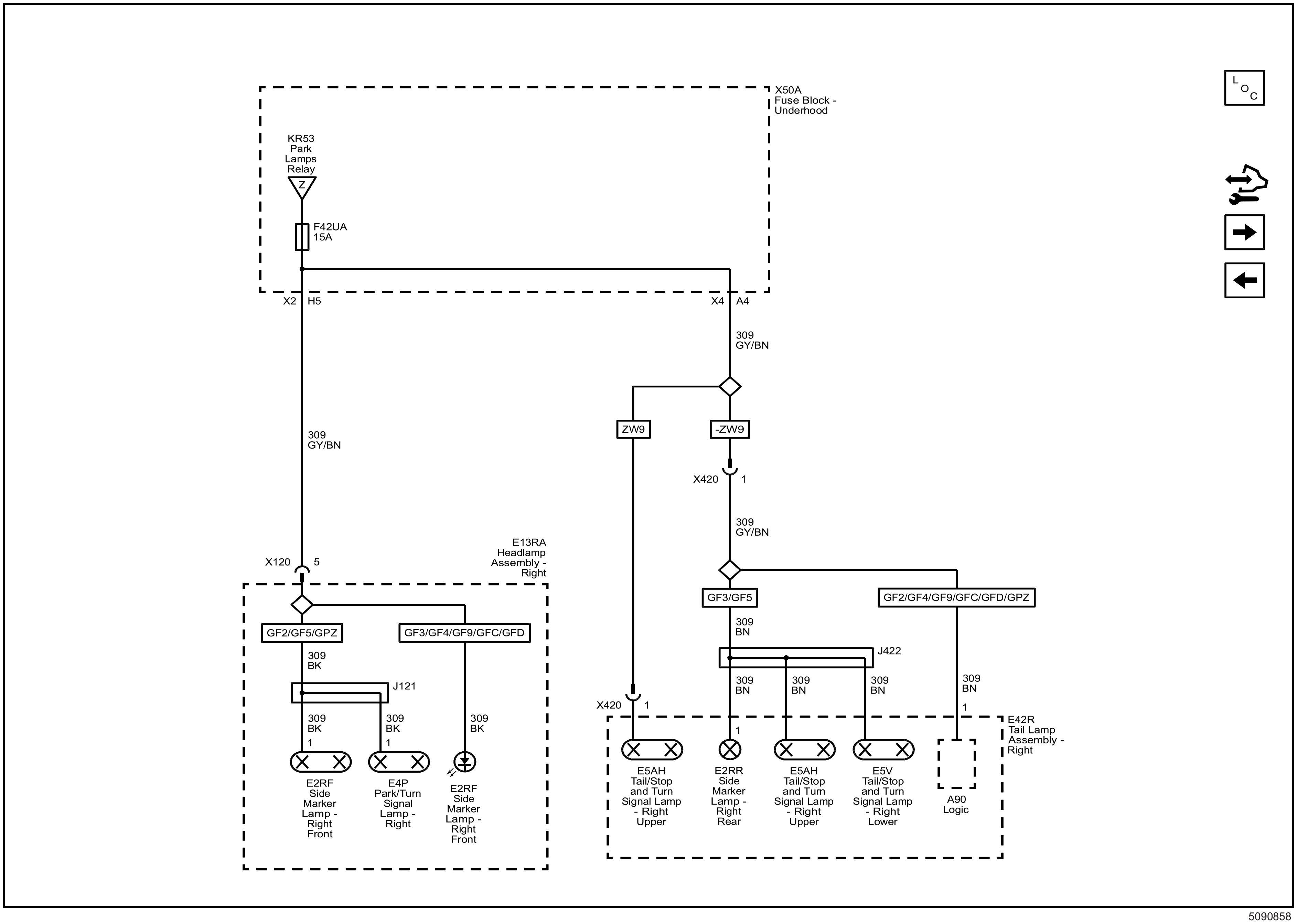

4937730
L O C
X50A
Fuse Block - Underhood
B+
B+ BUS
KR63L
Trailer Stop/Turn Signal Lamp Relay - Left
F73UA
10A
G3
X4
Z82-U1D
318
YE/BU
KR63R
Trailer Stop/Turn Signal Lamp Relay - Right
F81UA
10A
H3
Z82-U1D
1619
GN/VT
D
G
X1
X88
Trailer Connector
KR11
Windshield Washer Pump Relay
F8UA
15A
B5
X1
225
GY/VT
1
G24
Windshield Washer Pump
KR59
Stop Lamp Relay
F53UA
10A
H1
X2
X4 - A1
(Not Used)
1054
VT/GY
73
X275
1054
VT/GY
39
X256
5065
VT/WH
2
X380
5065
VT/WH
2
E6
Center High Mounted Stop Lamp
KR46
Front Fog Lamp Relay
F8UA
15A
B3
T3U
2234
BN/VT
9
X100
2234
BN/VT
J102
2234
BN/VT
1
E29LF
Fog Lamp - Left Front
2234
BN/VT
1
E29RF
Fog Lamp - Right Front

## Power Distribution Schematics (F34UA, F41UA, and F52UA Fuses (X88))

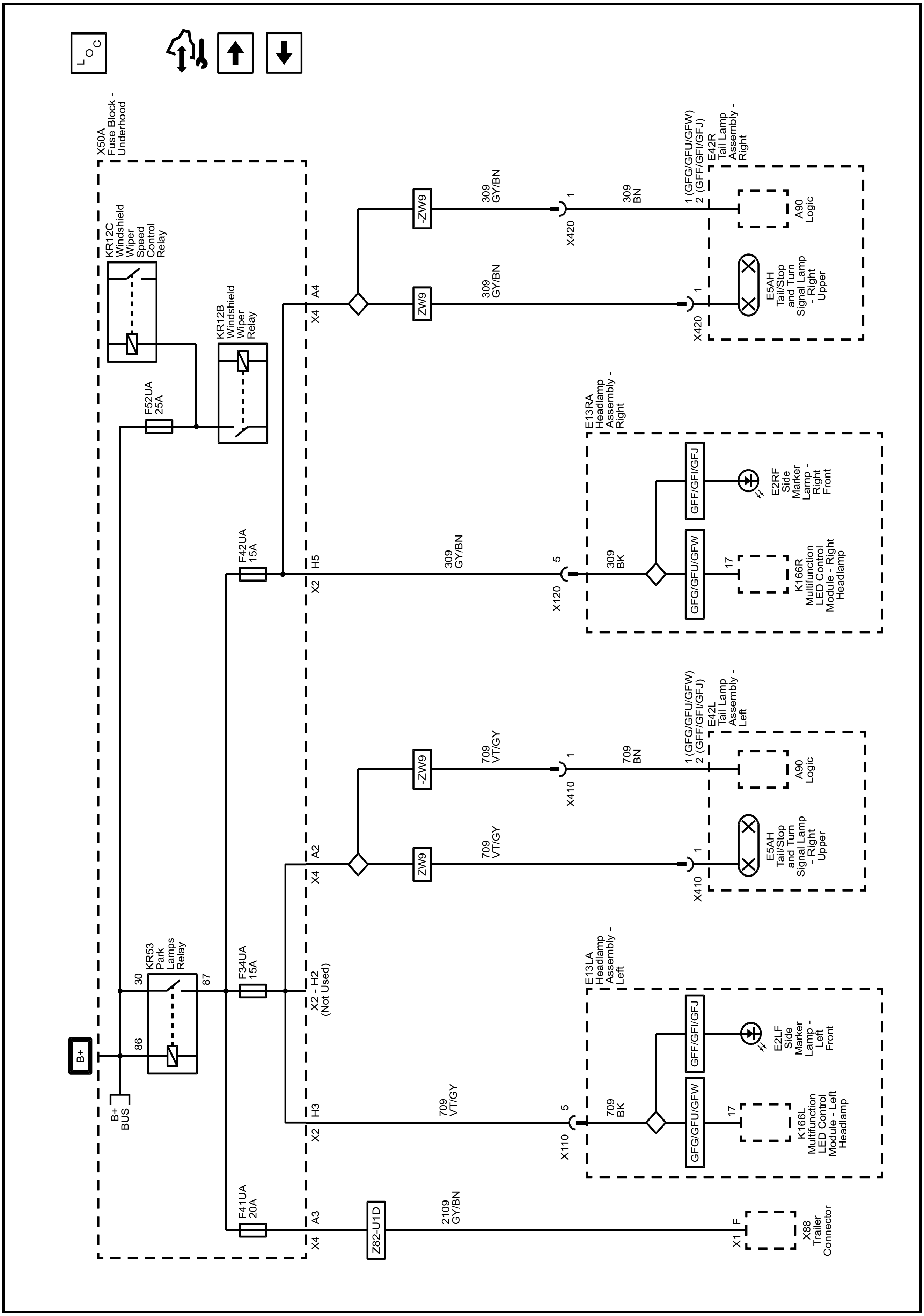
4937731


X50A
Fuse Block - Underhood
B+
B+ BUS
KR53 Park Lamps Relay
86
30
87
F34UA 15A
F42UA
F41UA 20A
F52UA 25A
KR12B Windshield Wiper Relay
KR12C Windshield Wiper Speed Control Relay
X2 - H2 (Not Used)
X2 H3
X4 A3
X4 A2
709 VT/GY
-ZW9
ZW9
X410 1
709 BN
GF3/GF5
GF2/GF4/GF9/GFC/GFD/GPZ
J412
709 BN 1
E42L Tail Lamp Assembly - Left
A90 Logic
E5U Tail/Stop and Turn Signal Lamp - Left Lower
E5AG Tail/Stop and Turn Signal Lamp - Left Upper
E2LR Side Marker Lamp - Left Rear
E5S Tail/Stop and Turn Signal Lamp - Left
X110 5
709 BK
E13LA Headlamp Assembly - Left
GF2/GF5/GPZ
GF3/GF4/GF9/GFC/GFD
J111
E2LF Side Marker Lamp - Left Front
E4N Park/Turn Signal Lamp - Left
Z82-U1D
2109 GY/BN
X1 F
X88 Trailer Connector

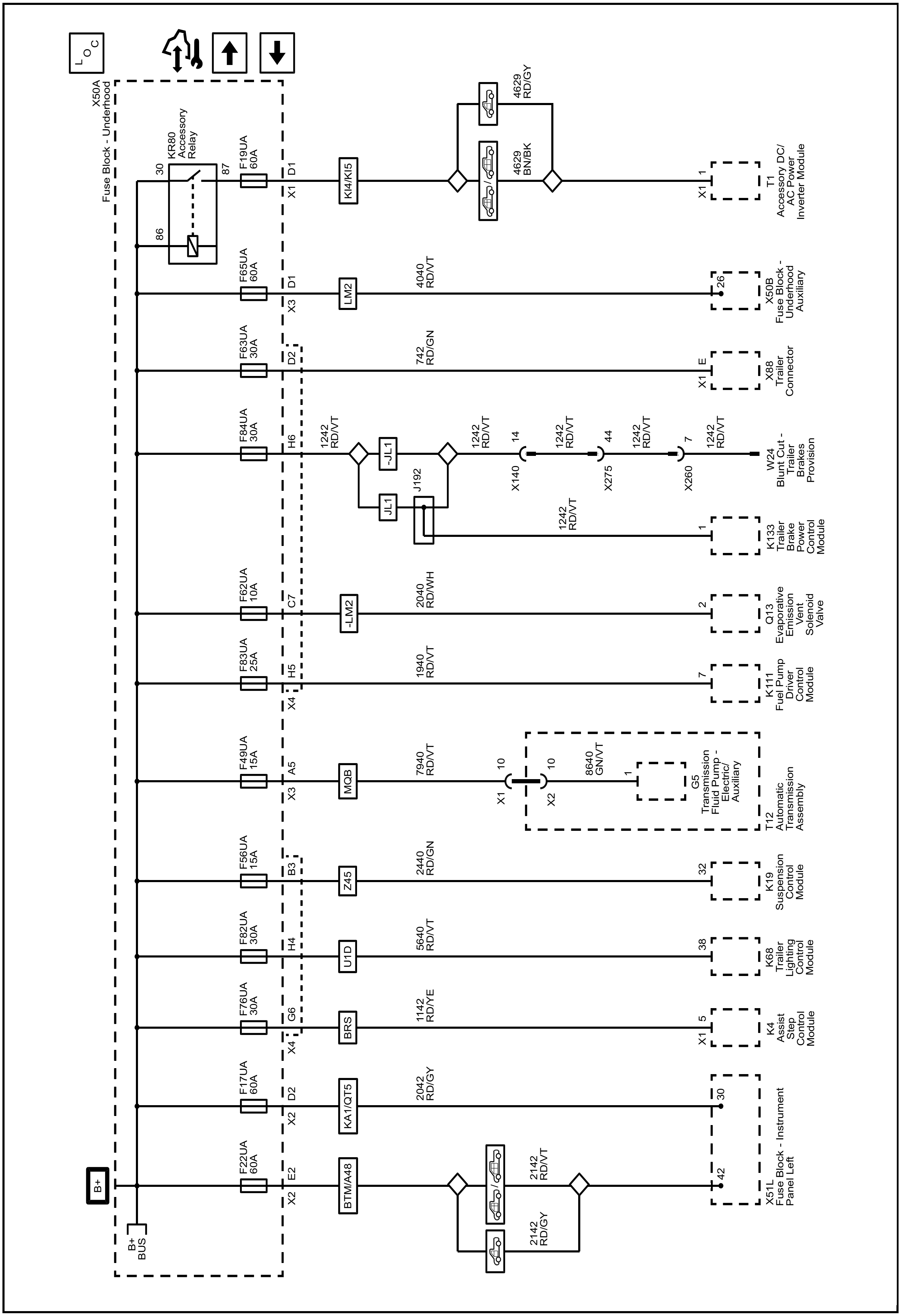
## Power Distribution Schematics (F42UA Fuse (X88))


X50A
Fuse Block - Underhood
KR53 Park Lamps Relay
Z
F42UA 15A
X2
H5
X4
A4
309 GY/BN
309 GY/BN
ZW9
-ZW9
X420
1
309 GY/BN
X120
5
E13RA Headlamp Assembly - Right
GF2/GF5/GPZ
GF3/GF4/GF9/GFC/GFD
309 BK
J121
309 BK
1
309 BK
1
309 BK
E2RF Side Marker Lamp - Right Front
E4P Park/Turn Signal Lamp - Right
E2RF Side Marker Lamp - Right Front
GF3/GF5
GF2/GF4/GF9/GFC/GFD/GPZ
309 BN
J422
309 BN
309 BN
309 BN
309 BN
X420
1
1
1
E42R Tail Lamp Assembly - Right
E5AH Tail/Stop and Turn Signal Lamp - Right Upper
E2RR Side Marker Lamp - Right Rear
E5AH Tail/Stop and Turn Signal Lamp - Right Upper
E5V Tail/Stop and Turn Signal Lamp - Right Lower
A90 Logic
5090858

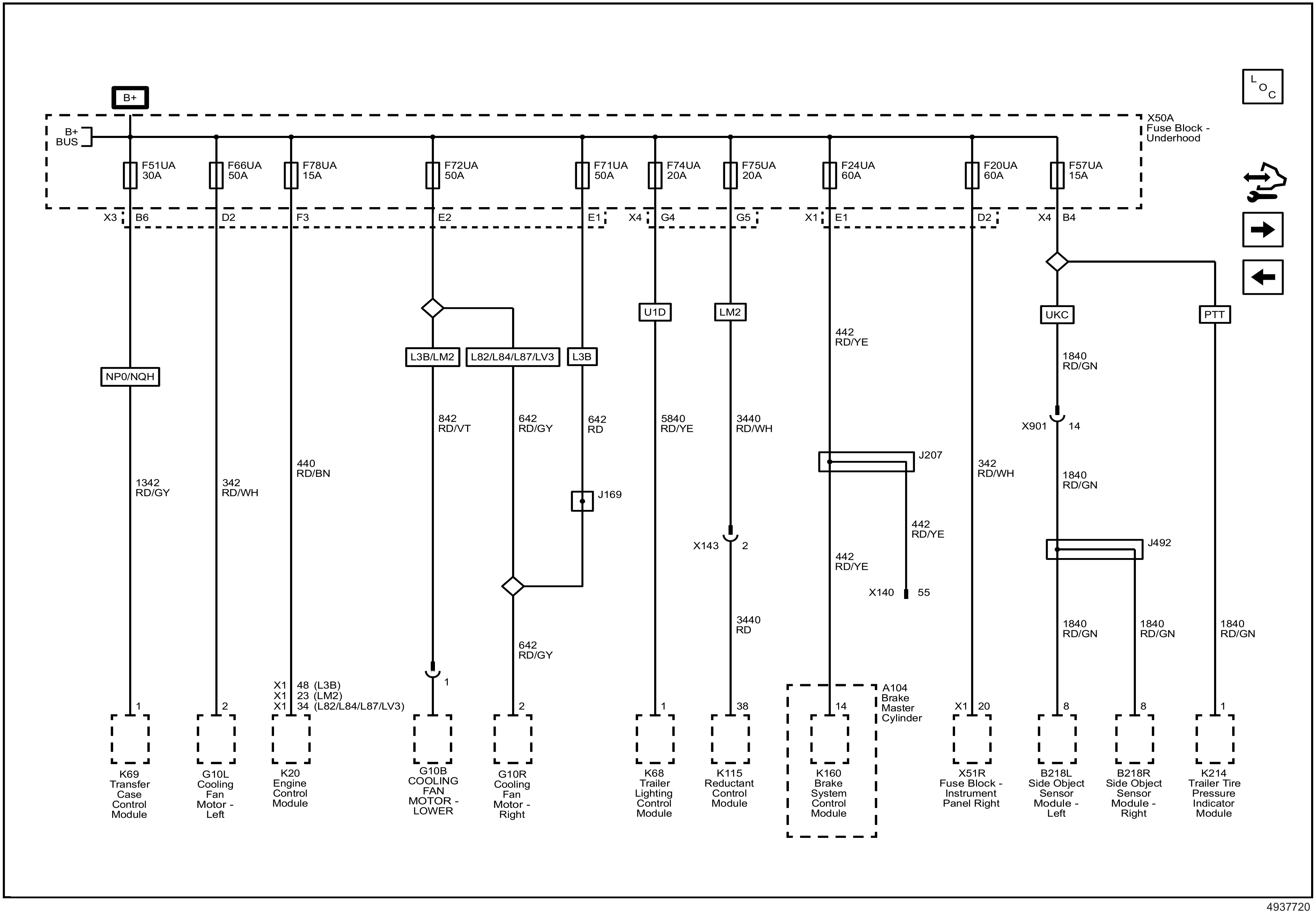
## Power Distribution Schematics (F34UA, F41UA, F42UA, and F52UA Fuses (Z88))


5090859
L O C
B+
B+ BUS
X50A Fuse Block - Underhood
KR12C Windshield Wiper Speed Control Relay
KR12B Windshield Wiper Relay
F52UA 25A
F42UA 15A
KR53 Park Lamps Relay
30
86
87
F34UA 15A
F41UA 20A
X4 A4
X2 H5
X4 A2
X2 - H2 (Not Used)
X2 H3
X4 A3
-ZW9
ZW9
Z82-U1D
309 GY/BN
309 BN
309 BK
709 VT/GY
709 BN
709 BK
2109 GY/BN
X420 1
X120 5
X410 1
X110 5
X1 F
1 (GFG/GFU/GFW) 2 (GFF/GFI/GFJ)
E42R Tail Lamp Assembly - Right
A90 Logic
E5AH Tail/Stop and Turn Signal Lamp - Right Upper
E13RA Headlamp Assembly - Right
GFG/GFU/GFW
GFF/GFI/GFJ
17
K166R Multifunction LED Control Module - Right Headlamp
E2RF Side Marker Lamp - Right Front
E42L Tail Lamp Assembly - Left
E13LA Headlamp Assembly - Left
K166L Multifunction LED Control Module - Left Headlamp
E2LF Side Marker Lamp - Left Front
X88 Trailer Connector

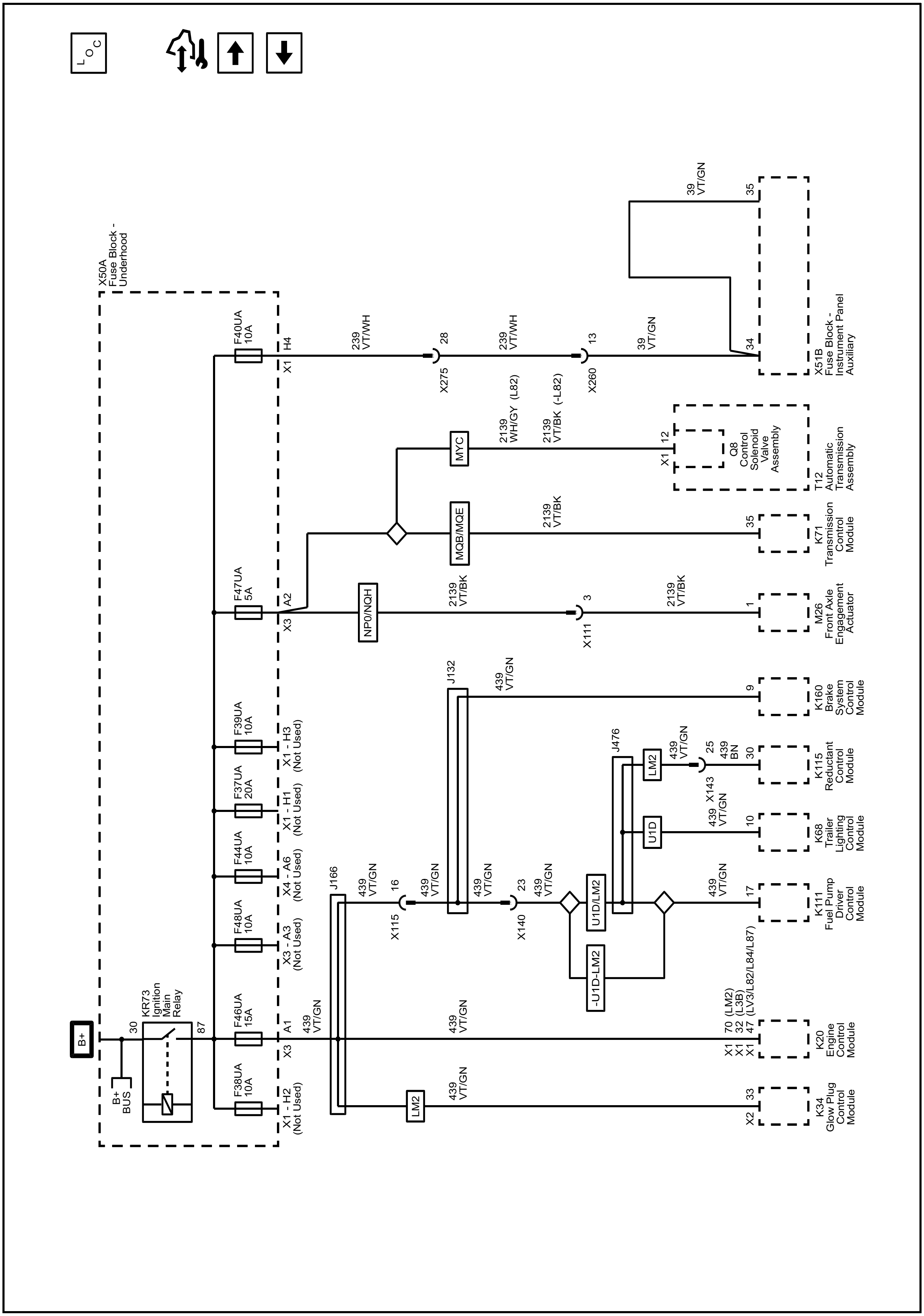
## Power Distribution Schematics (F17UA, F19UA, F22UA, F49UA, F56UA, F62UA, F63UA, F65UA, F76UA, F82UA, F83UA, and F84UA Fuses)


4937722
X50A Fuse Block - Underhood
B+
B+ BUS
KR80 Accessory Relay
30
87
86
F19UA 60A
X1 D1
KI4/KI5
4629 BN/BK
4629 RD/GY
X1 1
T1 Accessory DC/ AC Power Inverter Module
F65UA 60A
X3 D1
LM2
4040 RD/VT
26
X50B Fuse Block - Underhood Auxiliary
F63UA 30A
D2
742 RD/GN
X1 E
X88 Trailer Connector
F84UA 30A
H6
1242 RD/VT
~JL1
JL1
J192
14
X140
44
X275
7
X260
W24 Blunt Cut - Trailer Brakes Provision
1
K133 Trailer Brake Power Control Module
F62UA 10A
C7
~LM2
2040 RD/WH
2
Q13 Evaporative Emission Vent Solenoid Valve
F83UA 25A
H5
X4
1940 RD/VT
7
K111 Fuel Pump Driver Control Module
F49UA 15A
X3 A5
MQB
7940 RD/VT
X1 10
X2 10
8640 GN/VT
1
G5 Transmission Fluid Pump - Electric/ Auxiliary
T12 Automatic Transmission Assembly
F56UA 15A
B3
Z45
2440 RD/GN
32
K19 Suspension Control Module
F82UA 30A
H4
U1D
5640 RD/VT
38
K68 Trailer Lighting Control Module
F76UA 30A
X4 G6
BRS
1142 RD/YE
X1 5
K4 Assist Step Control Module
F17UA 60A
X2 D2
KA1/QT5
2042 RD/GY
30
F22UA 60A
X2 E2
BTM/A48
2142 RD/VT
2142 RD/GY
42
X51L Fuse Block - Instrument Panel Left

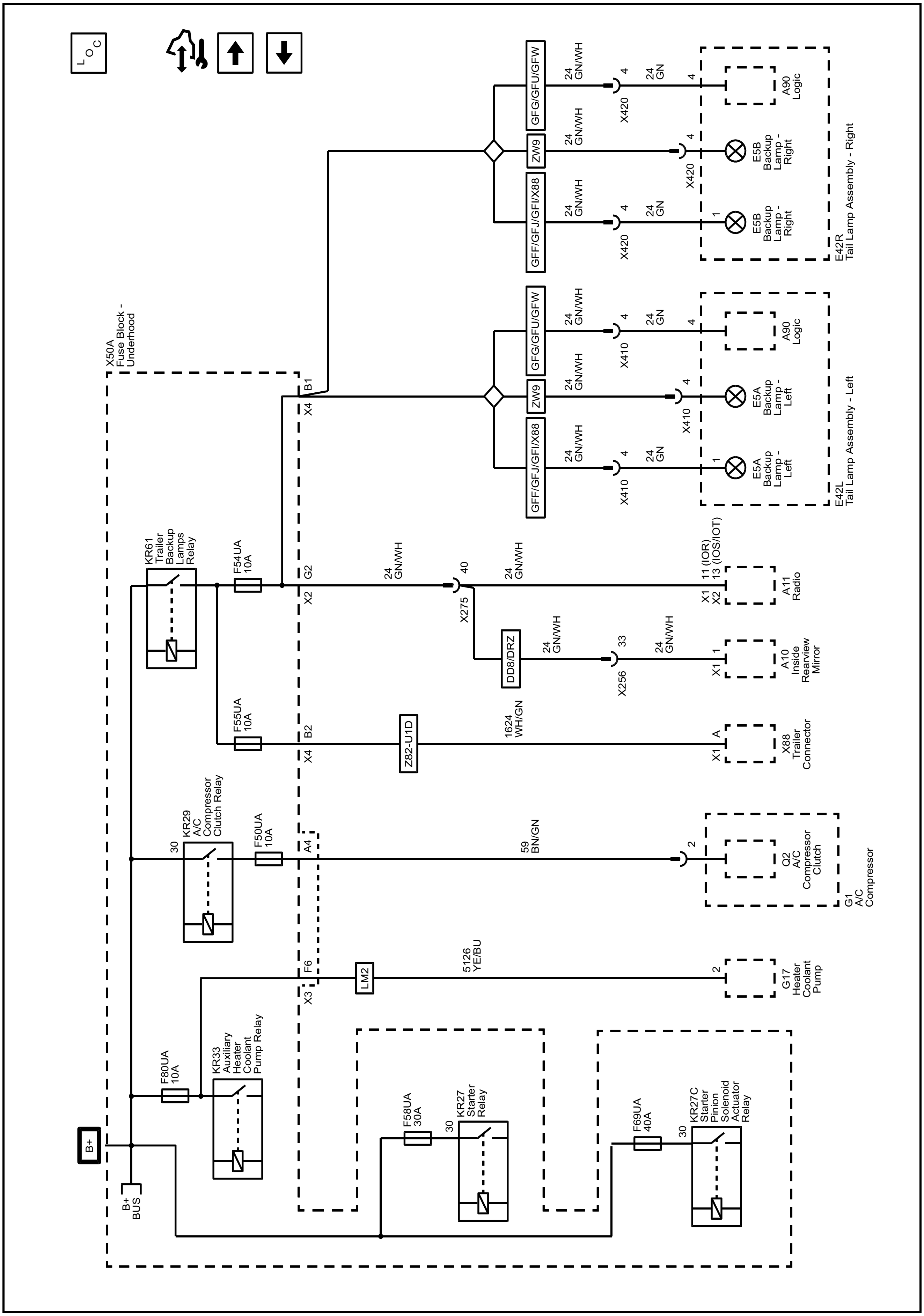
## Power Distribution Schematics (F20UA, F24UA, F51UA, F57UA, F66UA, F71UA, F72UA, F74UA, F75UA, and F78UA Fuses)


L O C
B+
B+ BUS
X50A Fuse Block - Underhood
F51UA 30A
F66UA 50A
F78UA 15A
F72UA 50A
F71UA 50A
F74UA 20A
F75UA 20A
F24UA 60A
F20UA 60A
F57UA 15A
X3 B6
D2
F3
E2
E1
X4 G4
G5
X1 E1
D2
X4 B4
NP0/NQH
1342 RD/GY
342 RD/WH
440 RD/BN
L3B/LM2
842 RD/VT
L82/L84/L87/LV3
642 RD/GY
L3B
642 RD
J169
642 RD/GY
U1D
5840 RD/YE
LM2
3440 RD/WH
X143 2
3440 RD
442 RD/YE
J207
442 RD/YE
X140 55
442 RD/YE
342 RD/WH
UKC
1840 RD/GN
X901 14
1840 RD/GN
J492
1840 RD/GN
1840 RD/GN
PTT
1840 RD/GN
1
2
X1 48 (L3B)
X1 23 (LM2)
X1 34 (L82/L84/L87/LV3)
1
2
1
38
A104 Brake Master Cylinder
14
X1 20
8
8
1
K69 Transfer Case Control Module
G10L Cooling Fan Motor - Left
K20 Engine Control Module
G10B COOLING FAN MOTOR - LOWER
G10R Cooling Fan Motor - Right
K68 Trailer Lighting Control Module
K115 Reductant Control Module
K160 Brake System Control Module
X51R Fuse Block - Instrument Panel Right
B218L Side Object Sensor Module - Left
B218R Side Object Sensor Module - Right
K214 Trailer Tire Pressure Indicator Module
4937720

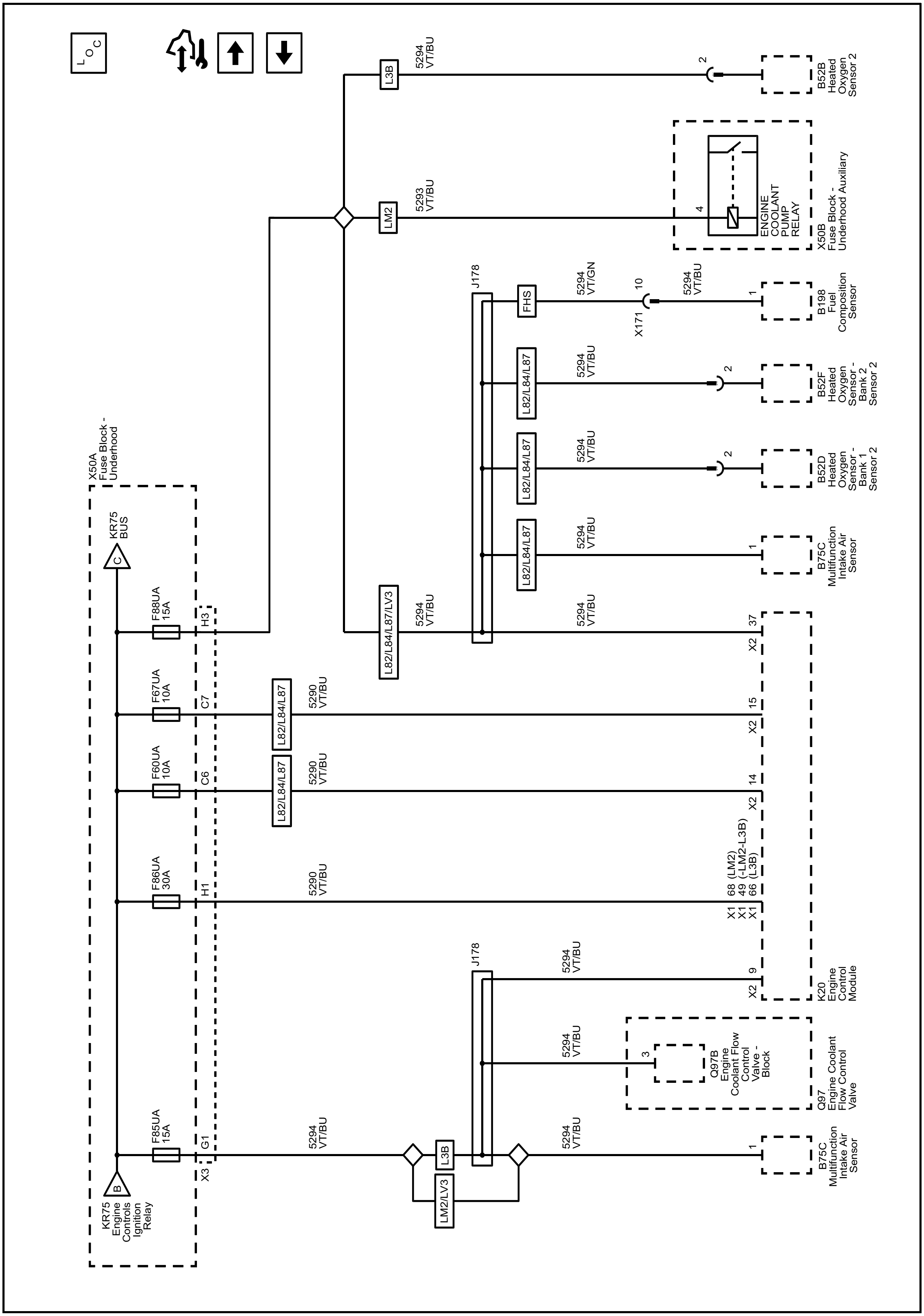
# Power Distribution Schematics (F37UA, F38UA, F39UA, F40UA, F44UA, F46UA, F47UA, and F48UA Fuses)


4937723
L O C
B+
B+ BUS
30
KR73 Ignition Main Relay
87
X50A Fuse Block - Underhood
F38UA 10A
X1 - H2 (Not Used)
F46UA 15A
X3 A1
F48UA 10A
X3 - A3 (Not Used)
F44UA 10A
X4 - A6 (Not Used)
F37UA 20A
X1 - H1 (Not Used)
F39UA 10A
X1 - H3 (Not Used)
F47UA 5A
X3 A2
F40UA 10A
X1 H4
J166
439 VT/GN
LM2
X115
16
J132
X140
23
-U1D-LM2
U1D/LM2
J476
U1D
LM2
X143
25
439 BN
NP0/NQH
2139 VT/BK
X111
3
MQB/MQE
MYC
2139 WH/GY (L82)
2139 VT/BK (-L82)
239 VT/WH
X275
28
X260
13
39 VT/GN
X2 33
K34 Glow Plug Control Module
X1 70 (LM2)
X1 32 (L3B)
X1 47 (LV3/L82/L84/L87)
K20 Engine Control Module
17
K111 Fuel Pump Driver Control Module
10
K68 Trailer Lighting Control Module
30
K115 Reductant Control Module
9
K160 Brake System Control Module
1
M26 Front Axle Engagement Actuator
35
K71 Transmission Control Module
X1 12
Q8 Control Solenoid Valve Assembly
T12 Automatic Transmission Assembly
34
35
X51B Fuse Block - Instrument Panel Auxiliary

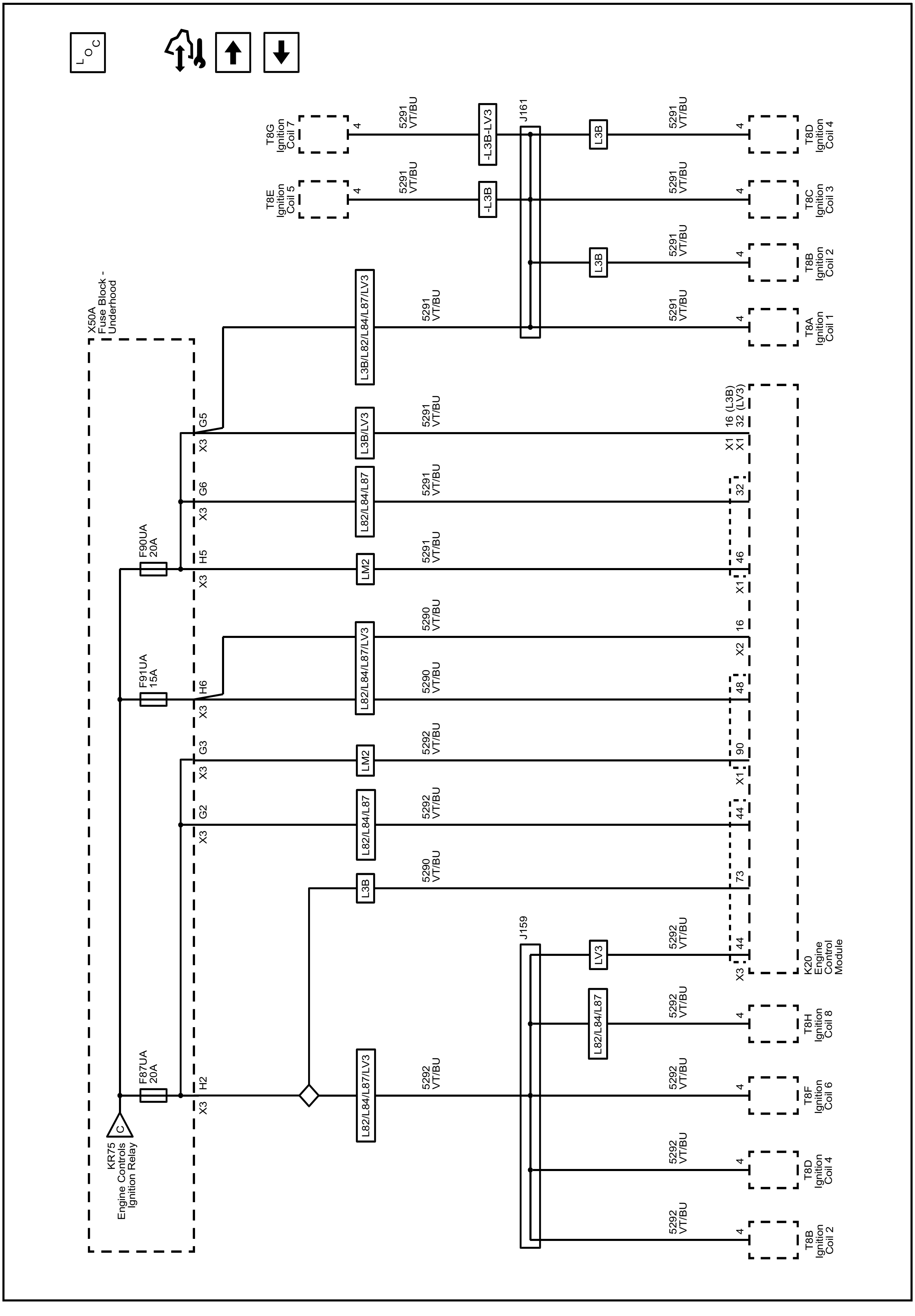
## Power Distribution Schematics (F50UA, F54UA, F55UA, F58UA, F69UA, and F80UA Fuses)


L O C
B+
B+ BUS
X50A Fuse Block - Underhood
F80UA 10A
KR33 Auxiliary Heater Coolant Pump Relay
X3 F6
LM2
5126 YE/BU
2
G17 Heater Coolant Pump
30
KR29 A/C Compressor Clutch Relay
F50UA 10A
A4
59 BN/GN
2
Q2 A/C Compressor Clutch
G1 A/C Compressor
F55UA 10A
X4 B2
Z82-U1D
1624 WH/GN
X1 A
X88 Trailer Connector
KR61 Trailer Backup Lamps Relay
F54UA 10A
X2 G2
24 GN/WH
40
X275
24 GN/WH
X1 11 (IOR)
X2 13 (IOS/IOT)
A11 Radio
DD8/DRZ
24 GN/WH
33
X256
24 GN/WH
X1 1
A10 Inside Rearview Mirror
X4 B1
GFF/GFJ/GFI/X88
ZW9
GFG/GFU/GFW
24 GN/WH
4
X410
24 GN
1
4
E5A Backup Lamp - Left
A90 Logic
E42L Tail Lamp Assembly - Left
GFF/GFJ/GFI/X88
ZW9
GFG/GFU/GFW
24 GN/WH
4
X420
24 GN
1
4
E5B Backup Lamp - Right
A90 Logic
E42R Tail Lamp Assembly - Right
F58UA 30A
30
KR27 Starter Relay
F69UA 40A
30
KR27C Starter Pinion Solenoid Actuator Relay
4937728

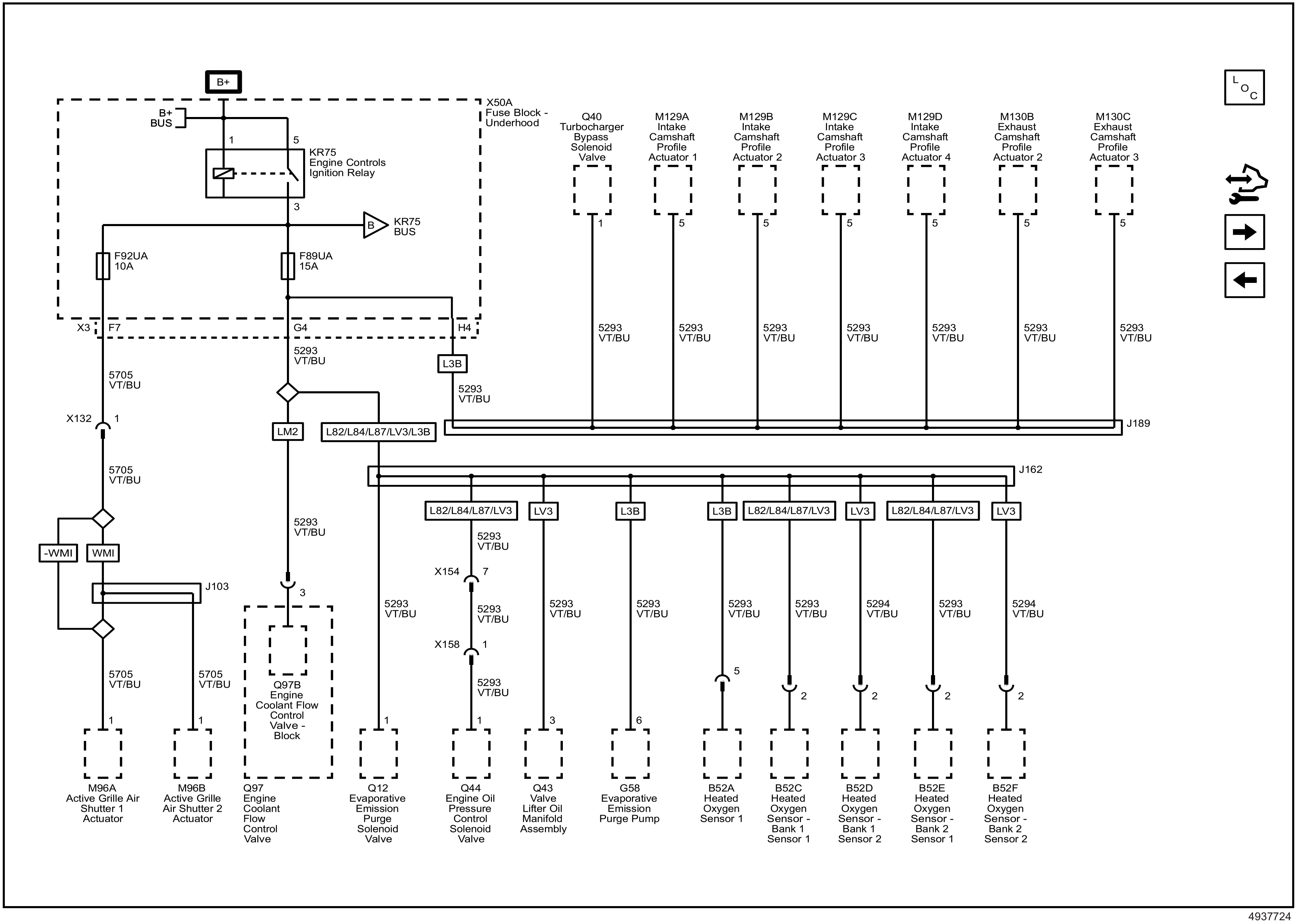
## Power Distribution Schematics (F60UA, F67UA, F85UA, F86UA, and F88UA Fuses)


4937726
LOC
X50A Fuse Block - Underhood
KR75 BUS
C
KR75 Engine Controls Ignition Relay
B
F88UA 15A
F67UA 10A
F60UA 10A
F86UA 30A
F85UA 15A
H3
C7
C6
H1
G1
X3
L3B
LM2
L82/L84/L87/LV3
L82/L84/L87
LM2/LV3
FHS
J178
5294 VT/BU
5293 VT/BU
5294 VT/GN
5290 VT/BU
X171
10
2
1
3
4
37
15
14
9
X2
X1 68 (LM2)
X1 49 (-LM2-L3B)
X1 66 (L3B)
B52B Heated Oxygen Sensor 2
ENGINE COOLANT PUMP RELAY
X50B Fuse Block - Underhood Auxiliary
B198 Fuel Composition Sensor
B52F Heated Oxygen Sensor - Bank 2 Sensor 2
B52D Heated Oxygen Sensor - Bank 1 Sensor 2
B75C Multifunction Intake Air Sensor
K20 Engine Control Module
Q97B Engine Coolant Flow Control Valve - Block
Q97 Engine Coolant Flow Control Valve

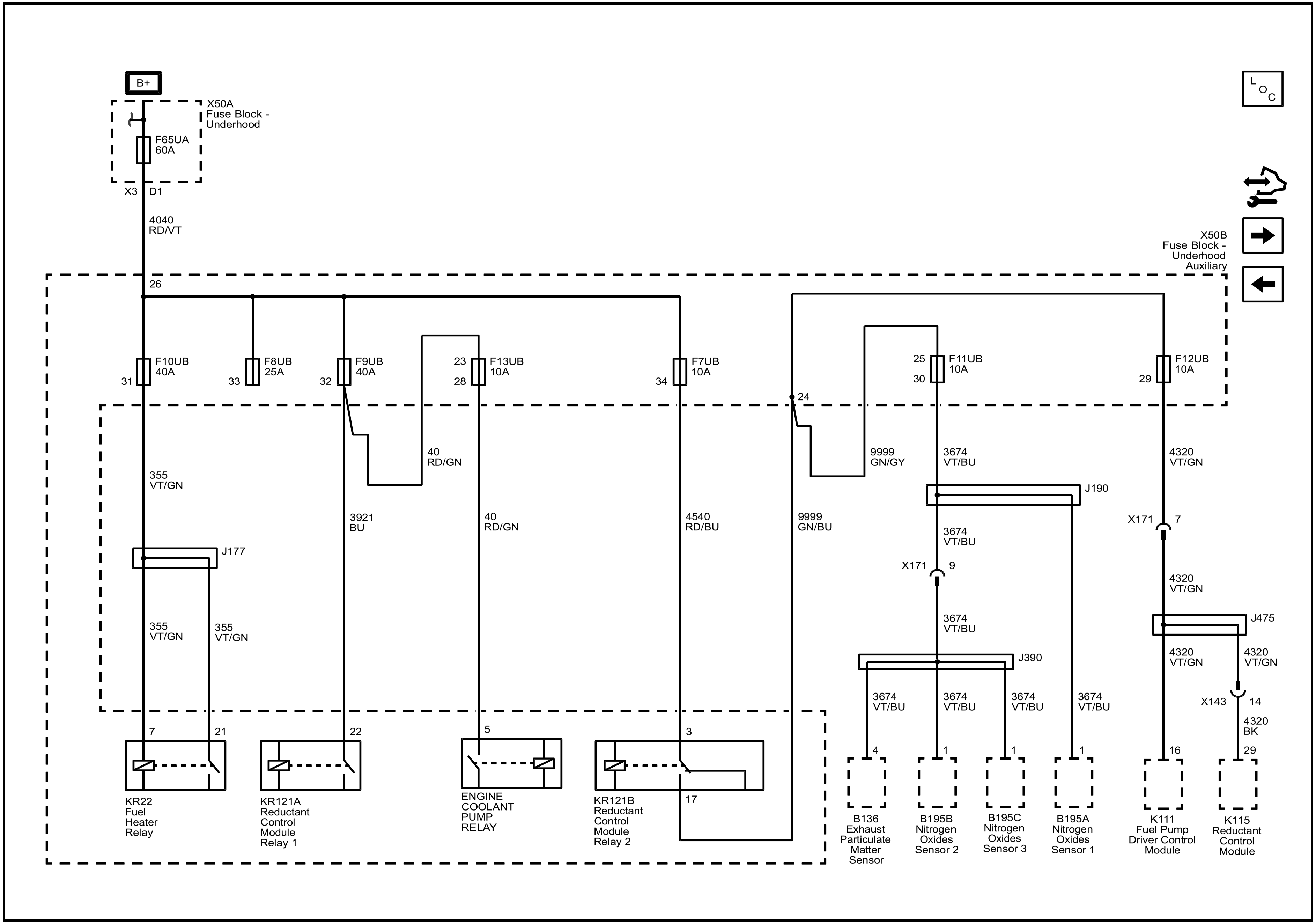
# Power Distribution Schematics (F87UA, F90UA, and F91UA Fuses)


4937727
LOC
X50A Fuse Block - Underhood
KR75 Engine Controls Ignition Relay
C
F87UA 20A
F91UA 15A
F90UA 20A
X3 H2
X3 G2
X3 G3
X3 H6
X3 H5
X3 G6
X3 G5
L82/L84/L87/LV3
L3B
L82/L84/L87
LM2
L82/L84/L87/LV3
L3B/LV3
L3B/L82/L84/L87/LV3
5290 VT/BU
5291 VT/BU
5292 VT/BU
K20 Engine Control Module
X1 16 (L3B)
X1 32 (LV3)
32
46
X1
16
X2
48
90
X1
44
73
44
X3
J159
J161
LV3
L82/L84/L87
-L3B
-L3B-LV3
4
T8A Ignition Coil 1
T8B Ignition Coil 2
T8C Ignition Coil 3
T8D Ignition Coil 4
T8E Ignition Coil 5
T8F Ignition Coil 6
T8G Ignition Coil 7
T8H Ignition Coil 8

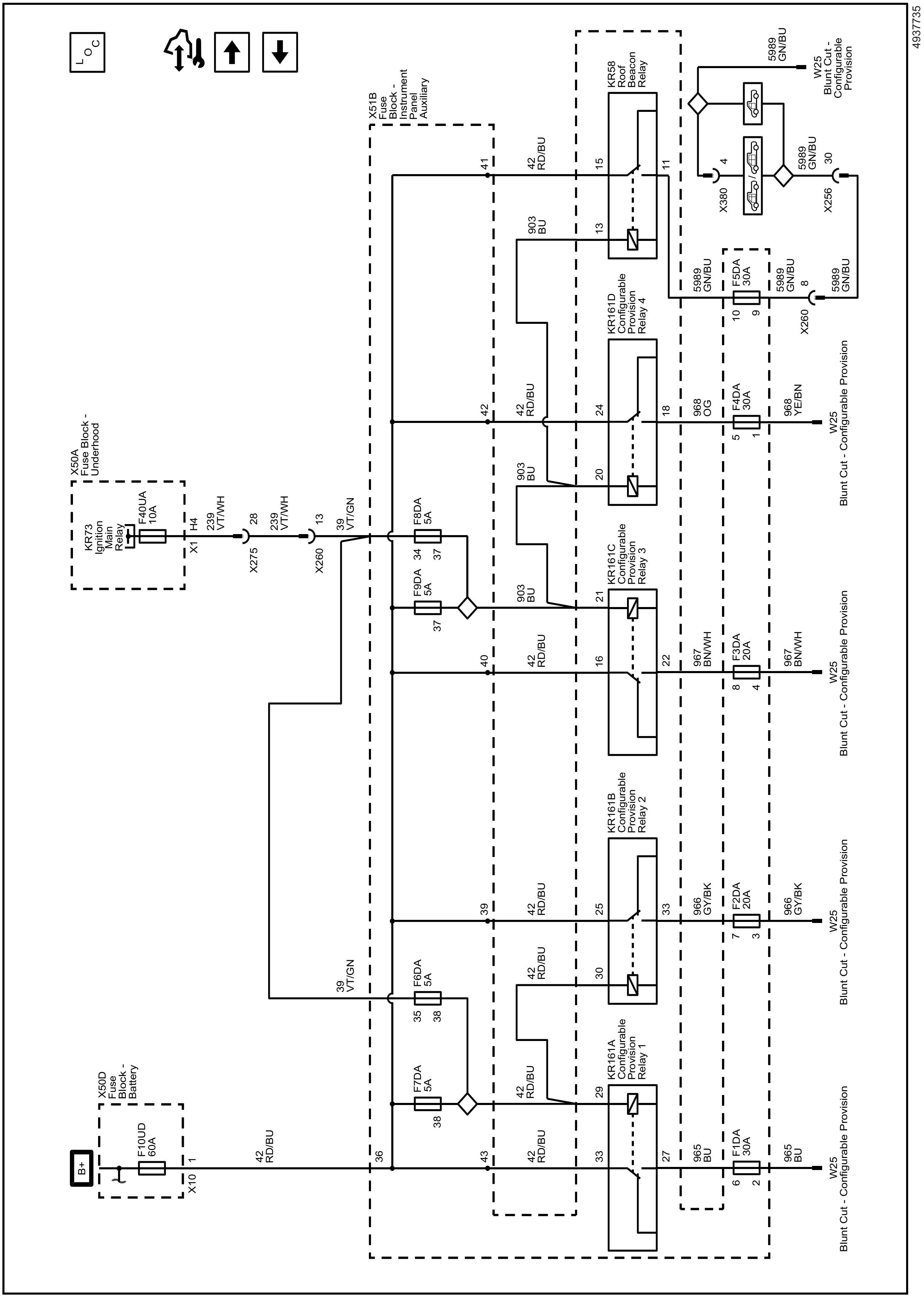
## Power Distribution Schematics (F89UA and F92UA Fuses)


L O C
B+
B+ BUS
X50A Fuse Block - Underhood
1
5
KR75 Engine Controls Ignition Relay
3
B
KR75 BUS
F92UA 10A
F89UA 15A
X3
F7
G4
H4
L3B
5705 VT/BU
5293 VT/BU
X132
1
LM2
L82/L84/L87/LV3/L3B
J189
J162
-WMI
WMI
J103
3
Q97B Engine Coolant Flow Control Valve - Block
Q40 Turbocharger Bypass Solenoid Valve
M129A Intake Camshaft Profile Actuator 1
M129B Intake Camshaft Profile Actuator 2
M129C Intake Camshaft Profile Actuator 3
M129D Intake Camshaft Profile Actuator 4
M130B Exhaust Camshaft Profile Actuator 2
M130C Exhaust Camshaft Profile Actuator 3
L82/L84/L87/LV3
LV3
L3B
X154
7
X158
5294 VT/BU
6
2
M96A Active Grille Air Shutter 1 Actuator
M96B Active Grille Air Shutter 2 Actuator
Q97 Engine Coolant Flow Control Valve
Q12 Evaporative Emission Purge Solenoid Valve
Q44 Engine Oil Pressure Control Solenoid Valve
Q43 Valve Lifter Oil Manifold Assembly
G58 Evaporative Emission Purge Pump
B52A Heated Oxygen Sensor 1
B52C Heated Oxygen Sensor - Bank 1 Sensor 1
B52D Heated Oxygen Sensor - Bank 1 Sensor 2
B52E Heated Oxygen Sensor - Bank 2 Sensor 1
B52F Heated Oxygen Sensor - Bank 2 Sensor 2
4937724

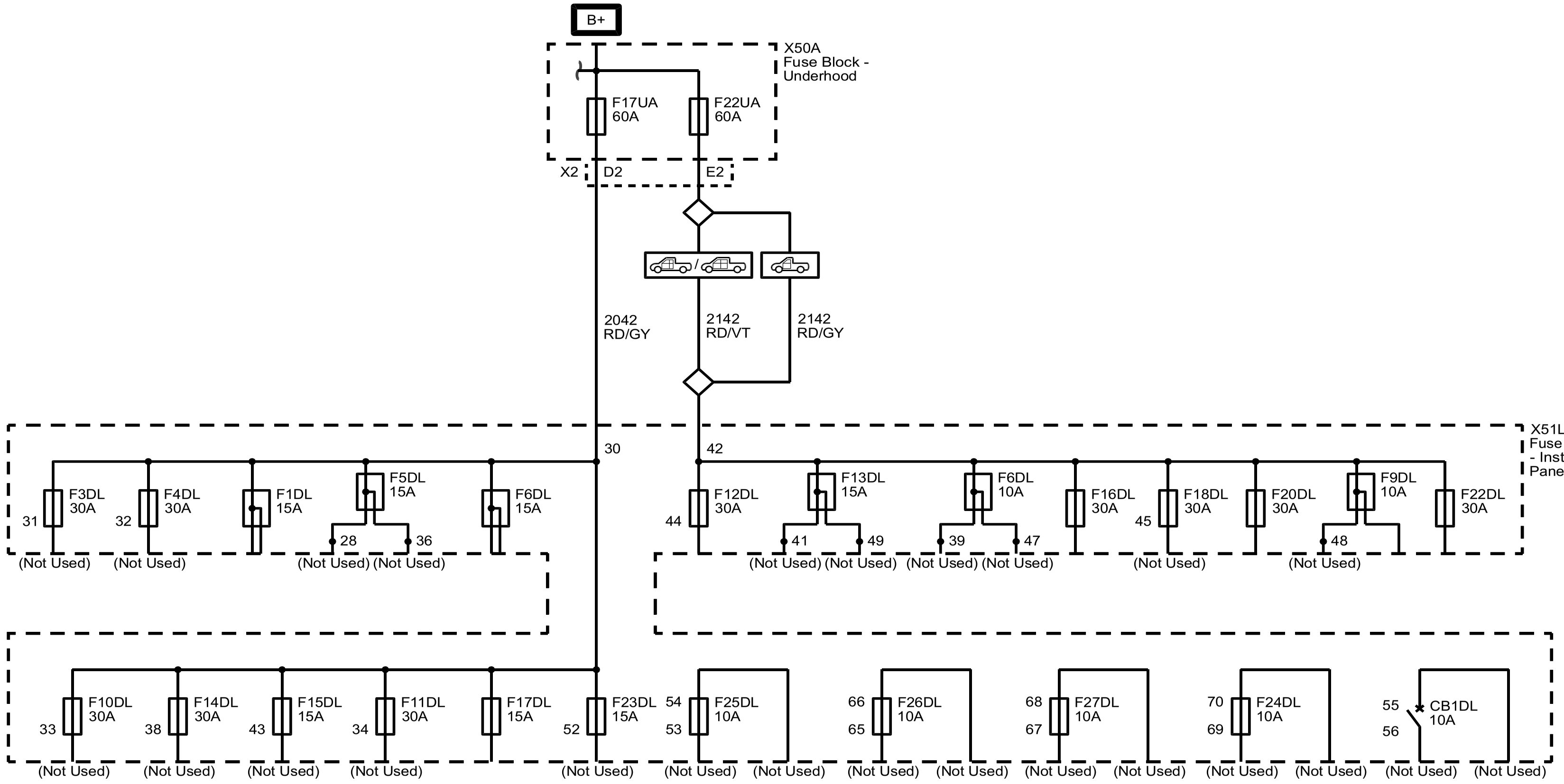
## Power Distribution Schematics (Auxiliary Underhood Fuse Block (LM2))


B+
X50A
Fuse Block -
Underhood
F65UA
60A
X3
D1
4040
RD/VT
26
X50B
Fuse Block -
Underhood
Auxiliary
F10UB
40A
31
F8UB
25A
33
F9UB
40A
32
23
F13UB
10A
28
F7UB
10A
34
24
25
F11UB
10A
30
F12UB
10A
29
355
VT/GN
40
RD/GN
9999
GN/GY
3674
VT/BU
4320
VT/GN
J190
3921
BU
40
RD/GN
4540
RD/BU
9999
GN/BU
X171
7
J177
3674
VT/BU
X171
9
4320
VT/GN
J475
3674
VT/BU
355
VT/GN
355
VT/GN
J390
4320
VT/GN
4320
VT/GN
3674
VT/BU
3674
VT/BU
3674
VT/BU
3674
VT/BU
X143
14
4320
BK
7
21
22
5
3
4
1
1
1
16
29
17
KR22
Fuel
Heater
Relay
KR121A
Reductant
Control
Module
Relay 1
ENGINE
COOLANT
PUMP
RELAY
KR121B
Reductant
Control
Module
Relay 2
B136
Exhaust
Particulate
Matter
Sensor
B195B
Nitrogen
Oxides
Sensor 2
B195C
Nitrogen
Oxides
Sensor 3
B195A
Nitrogen
Oxides
Sensor 1
K111
Fuel Pump
Driver Control
Module
K115
Reductant
Control
Module
L
O
C
4937732

# Power Distribution Schematics (Auxiliary Instrument Panel Fuse Block (9L7))

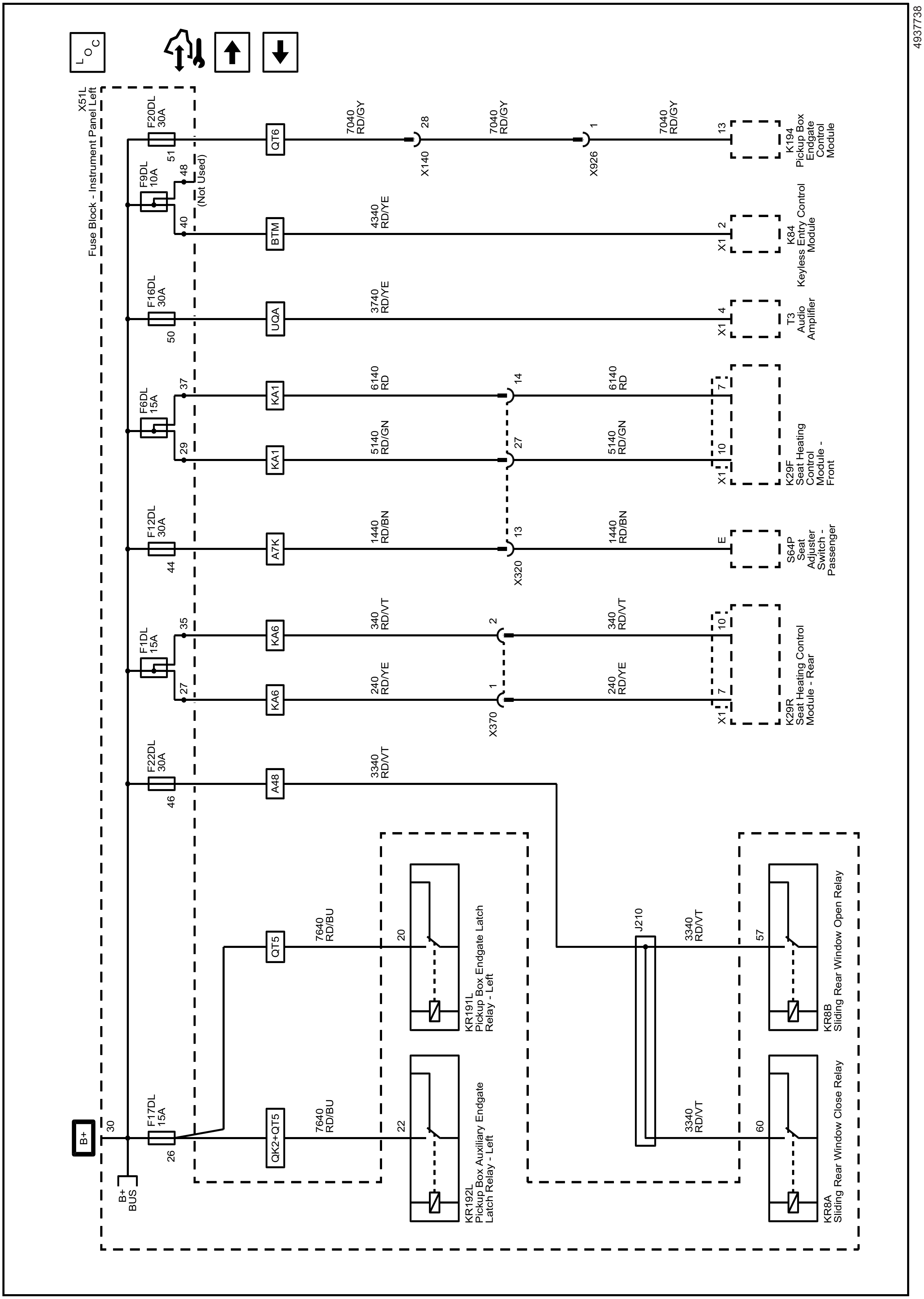

4937735
X50D Fuse Block - Battery
B+
F10UD 60A
X10 1
42 RD/BU
X50A Fuse Block - Underhood
KR73 Ignition Main Relay
F40UA 10A
X1 H4
239 VT/WH
X275 28
239 VT/WH
X260 13
39 VT/GN
39 VT/GN
X51B Fuse Block - Instrument Panel Auxiliary
36
F7DA 5A 38
F6DA 5A 35 38
F9DA 5A 37
F8DA 5A 34 37
43 39 40 42 41
42 RD/BU
903 BU
KR161A Configurable Provision Relay 1
33 29 27
KR161B Configurable Provision Relay 2
30 25 33
KR161C Configurable Provision Relay 3
21 16 22
KR161D Configurable Provision Relay 4
20 24 18
KR58 Roof Beacon Relay
13 15 11
965 BU
966 GY/BK
967 BN/WH
968 OG
968 YE/BN
5989 GN/BU
F1DA 30A 6 2
F2DA 20A 7 3
F3DA 20A 8 4
F4DA 30A 5 1
F5DA 30A 10 9
X260 8
X256 30
X380 4
W25 Blunt Cut - Configurable Provision
W25 Blunt Cut - Configurable Provision

# Power Distribution Schematics (Instrument Panel Fuse Block Bussing - Left)

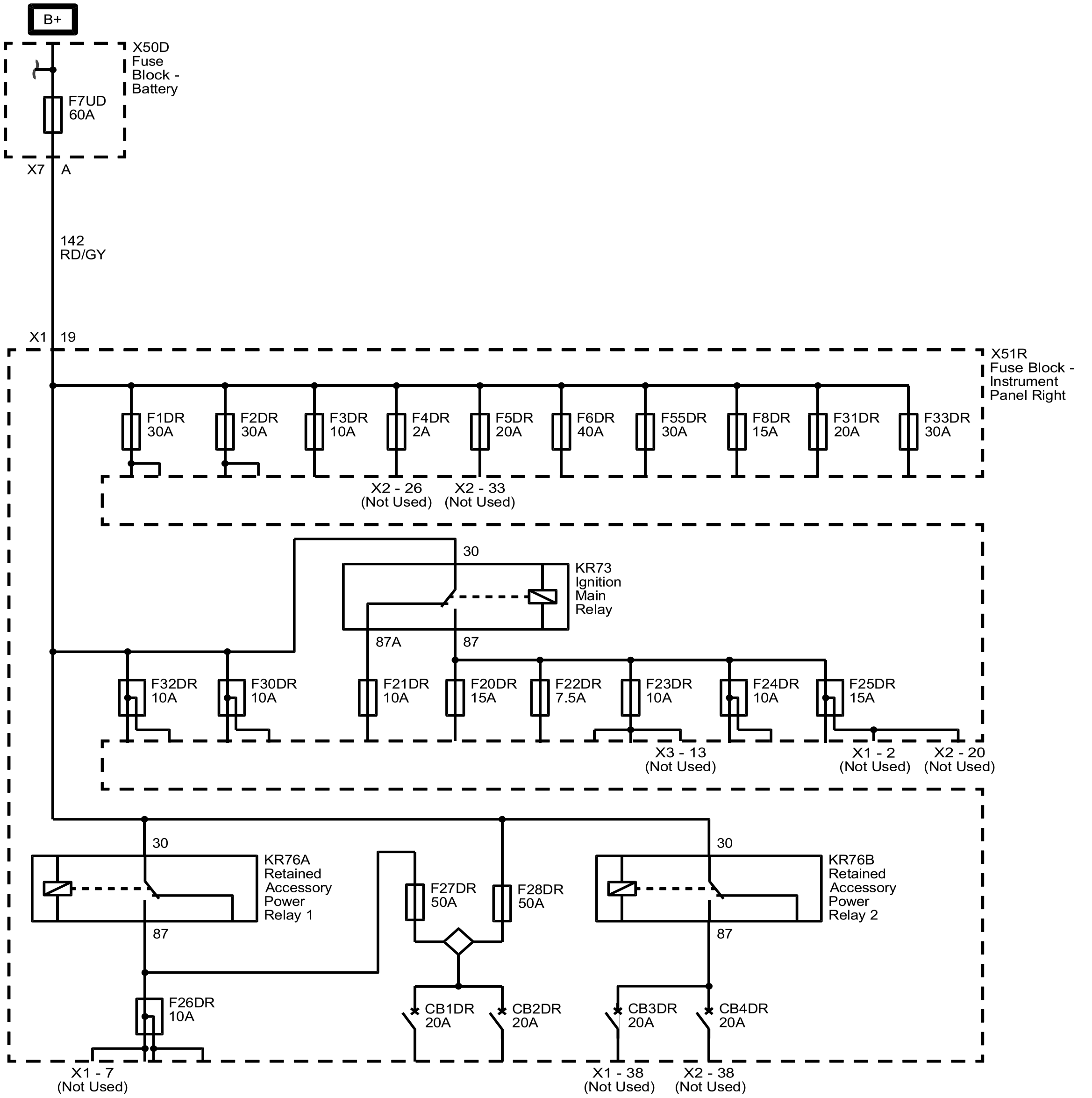

B+
X50A
Fuse Block -
Underhood
F17UA
60A
F22UA
60A
X2
D2
E2
2042
RD/GY
2142
RD/VT
2142
RD/GY
X51L
Fuse Block
- Instrument
Panel Left
30
42
F3DL
30A
31
F4DL
30A
32
F1DL
15A
F5DL
15A
28
36
F6DL
15A
F12DL
30A
44
F13DL
15A
41
49
F6DL
10A
39
47
F16DL
30A
F18DL
30A
45
F20DL
30A
F9DL
10A
48
F22DL
30A
(Not Used)
F10DL
30A
33
F14DL
30A
38
F15DL
15A
43
F11DL
30A
34
F17DL
15A
F23DL
15A
52
F25DL
10A
54
53
F26DL
10A
66
65
F27DL
10A
68
67
F24DL
10A
70
69
CB1DL
10A
55
56

4937737

# Power Distribution Schematics (F1DL, F8DL, F9DL, F12DL, F16DL, F17DL, F20DL, and F22DL Fuses)

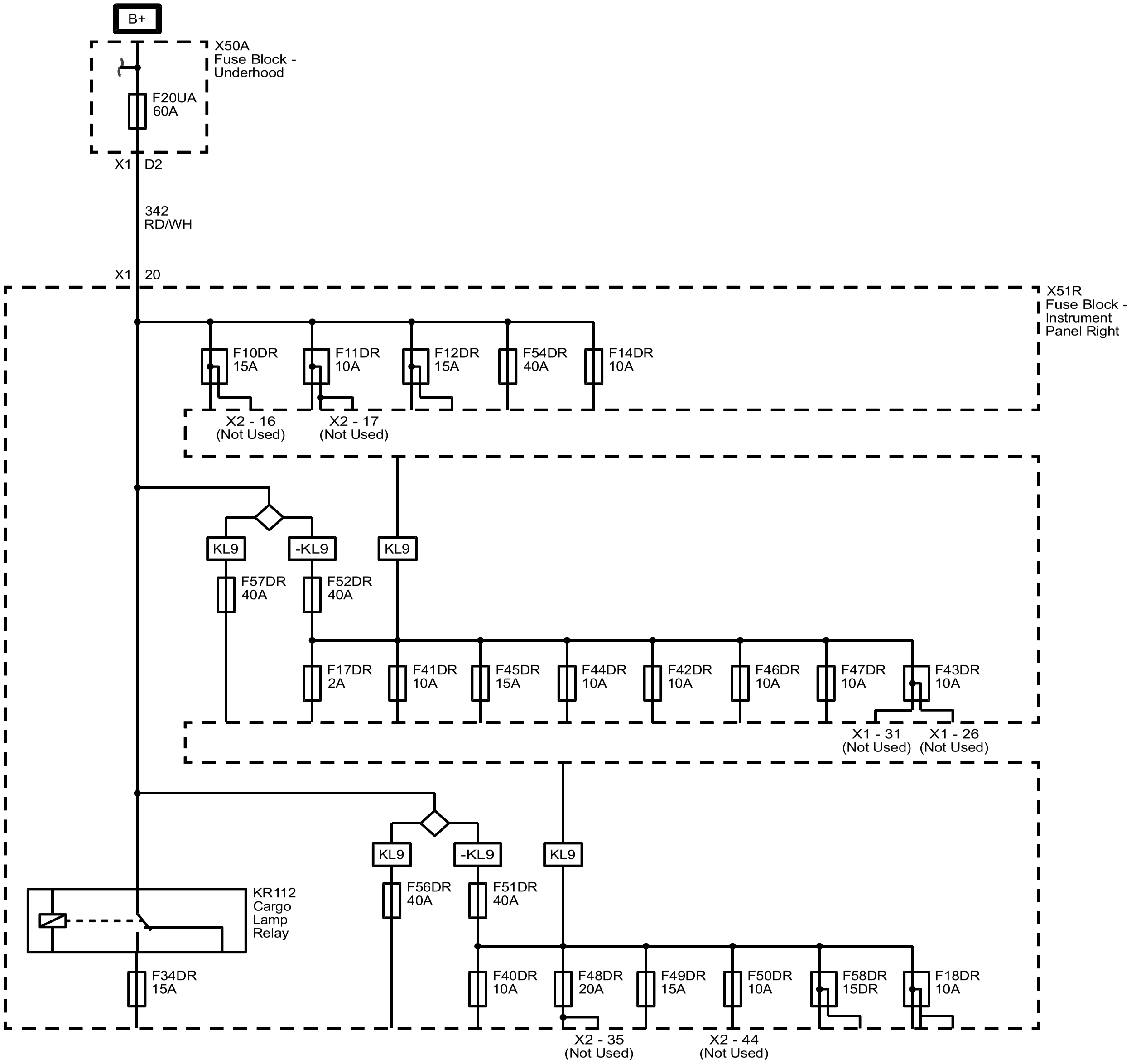

4937738
LOC
B+
30
B+ BUS
X51L
Fuse Block - Instrument Panel Left
F20DL 30A
51
F9DL 10A
48
(Not Used)
40
F16DL 30A
50
F6DL 15A
37
29
F12DL 30A
44
F1DL 15A
35
27
F22DL 30A
46
F17DL 15A
26
QT6
BTM
UQA
KA1
KA1
A7K
KA6
KA6
A48
QT5
QK2+QT5
7040 RD/GY
28
X140
7040 RD/GY
1
X926
7040 RD/GY
13
K194 Pickup Box Endgate Control Module
4340 RD/YE
X1 2
K84 Keyless Entry Control Module
3740 RD/YE
X1 4
T3 Audio Amplifier
6140 RD
14
6140 RD
7
5140 RD/GN
27
5140 RD/GN
X1 10
K29F Seat Heating Control Module - Front
1440 RD/BN
13
X320
1440 RD/BN
E
S64P Seat Adjuster Switch - Passenger
340 RD/VT
2
340 RD/VT
10
240 RD/YE
1
X370
240 RD/YE
X1 7
K29R Seat Heating Control Module - Rear
3340 RD/VT
7640 RD/BU
20
KR191L Pickup Box Endgate Latch Relay - Left
7640 RD/BU
22
KR192L Pickup Box Auxiliary Endgate Latch Relay - Left
J210
3340 RD/VT
57
KR8B Sliding Rear Window Open Relay
3340 RD/VT
60
KR8A Sliding Rear Window Close Relay

# Power Distribution Schematics (Instrument Panel Fuse Block Bussing - Right (1 of 2))


B+
X50D
Fuse
Block -
Battery
F7UD
60A
X7
A
142
RD/GY
X1
19
X51R
Fuse Block -
Instrument
Panel Right
F1DR
30A
F2DR
30A
F3DR
10A
F4DR
2A
F5DR
20A
F6DR
40A
F55DR
30A
F8DR
15A
F31DR
20A
F33DR
30A
X2 - 26
(Not Used)
X2 - 33
(Not Used)
30
KR73
Ignition
Main
Relay
87A
87
F32DR
10A
F30DR
10A
F21DR
10A
F20DR
15A
F22DR
7.5A
F23DR
10A
F24DR
10A
F25DR
15A
X3 - 13
(Not Used)
X1 - 2
(Not Used)
X2 - 20
(Not Used)
30
KR76A
Retained
Accessory
Power
Relay 1
87
F27DR
50A
F28DR
50A
30
KR76B
Retained
Accessory
Power
Relay 2
87
F26DR
10A
CB1DR
20A
CB2DR
20A
CB3DR
20A
CB4DR
20A
X1 - 7
(Not Used)
X1 - 38
(Not Used)
X2 - 38
(Not Used)

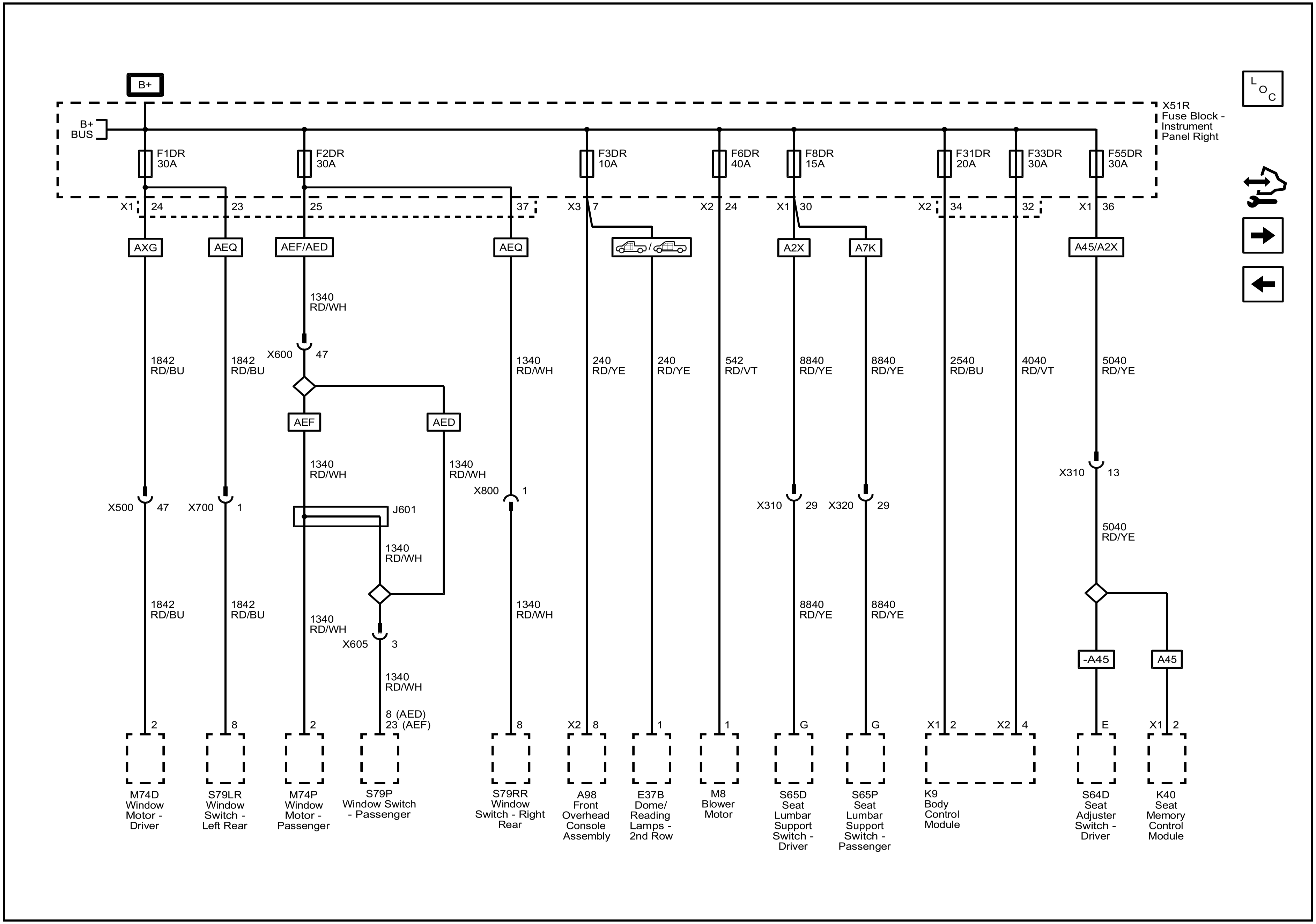
4937739

## Power Distribution Schematics (Instrument Panel Fuse Block Bussing - Right (2 of 2))

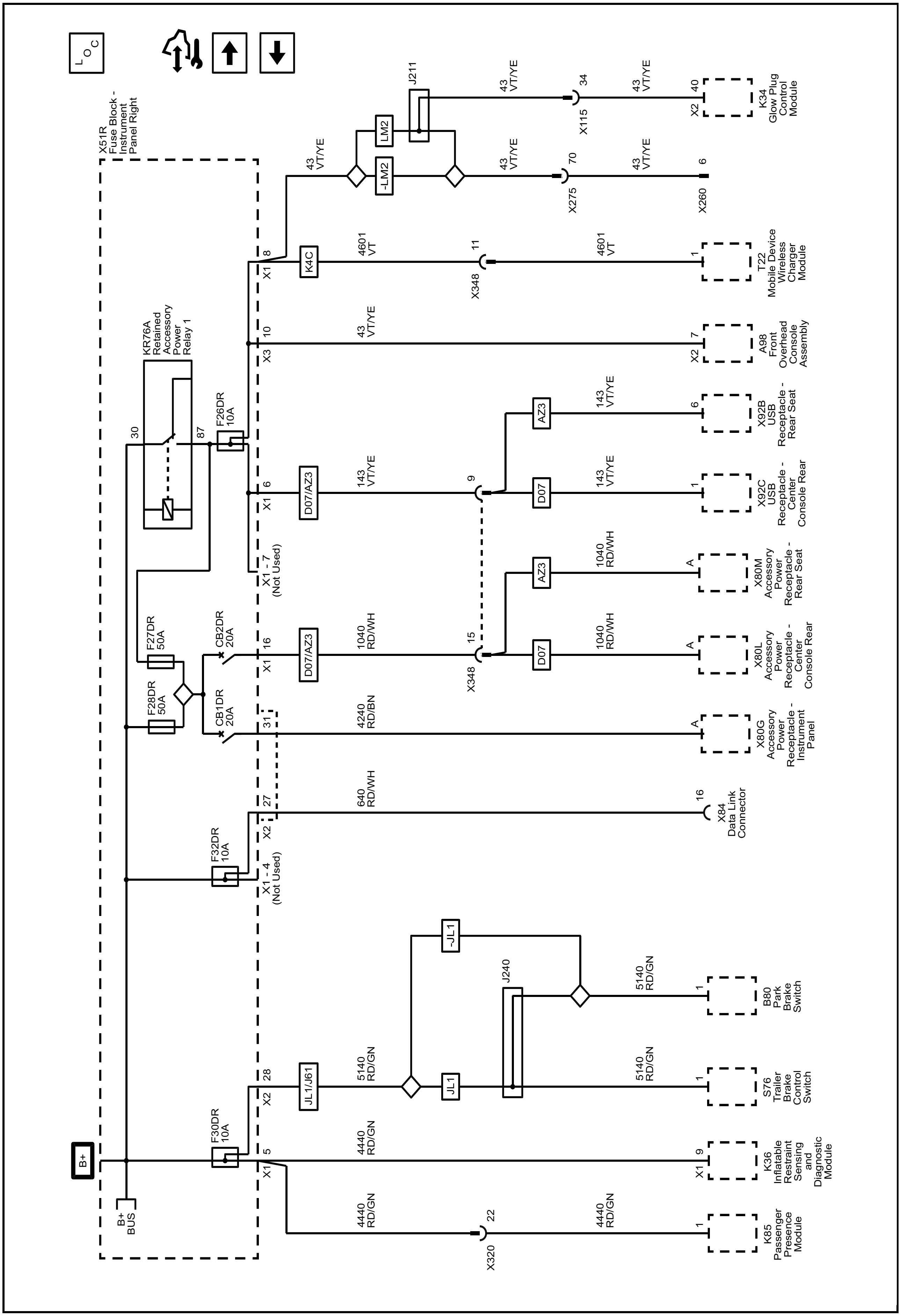

B+
X50A
Fuse Block -
Underhood
F20UA
60A
X1
D2
342
RD/WH
X1
20
X51R
Fuse Block -
Instrument
Panel Right
F10DR
15A
F11DR
10A
F12DR
15A
F54DR
40A
F14DR
10A
X2 - 16
(Not Used)
X2 - 17
(Not Used)
KL9
-KL9
KL9
F57DR
40A
F52DR
40A
F17DR
2A
F41DR
10A
F45DR
15A
F44DR
10A
F42DR
10A
F46DR
10A
F47DR
10A
F43DR
10A
X1 - 31
(Not Used)
X1 - 26
(Not Used)
KL9
-KL9
KL9
KR112
Cargo
Lamp
Relay
F56DR
40A
F51DR
40A
F34DR
15A
F40DR
10A
F48DR
20A
F49DR
15A
F50DR
10A
F58DR
15DR
F18DR
10A
X2 - 35
(Not Used)
X2 - 44
(Not Used)

4937740

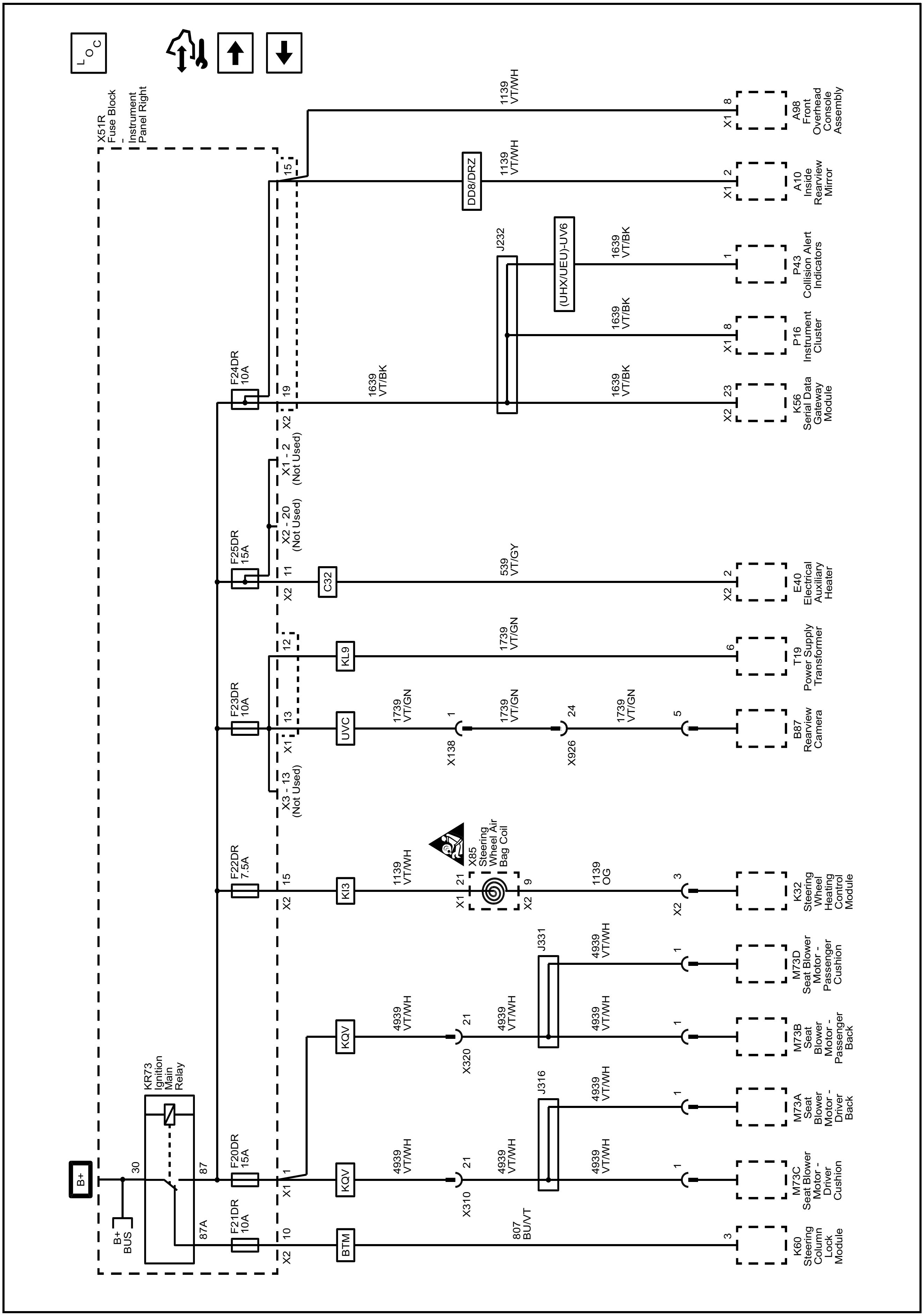
## Power Distribution Schematics (F1DR, F2DR, F3DR, F6DR, F8DR, F31DR, F33DR, and F55DR Fuses)


B+
B+ BUS
X51R Fuse Block - Instrument Panel Right
F1DR 30A
F2DR 30A
F3DR 10A
F6DR 40A
F8DR 15A
F31DR 20A
F33DR 30A
F55DR 30A
X1 24
23
25
37
X3 7
X2 24
X1 30
X2 34
32
X1 36
AXG
AEQ
AEF/AED
AEQ
A2X
A7K
A45/A2X
1340 RD/WH
X600 47
AEF
AED
1842 RD/BU
1340 RD/WH
240 RD/YE
542 RD/VT
8840 RD/YE
2540 RD/BU
4040 RD/VT
5040 RD/YE
X500 47
X700 1
J601
X800 1
X310 29
X320 29
X310 13
X605 3
-A45
A45
2
8
8 (AED) 23 (AEF)
X2 8
1
G
X1 2
X2 4
E
M74D Window Motor - Driver
S79LR Window Switch - Left Rear
M74P Window Motor - Passenger
S79P Window Switch - Passenger
S79RR Window Switch - Right Rear
A98 Front Overhead Console Assembly
E37B Dome/ Reading Lamps - 2nd Row
M8 Blower Motor
S65D Seat Lumbar Support Switch - Driver
S65P Seat Lumbar Support Switch - Passenger
K9 Body Control Module
S64D Seat Adjuster Switch - Driver
K40 Seat Memory Control Module
LOC
4937741

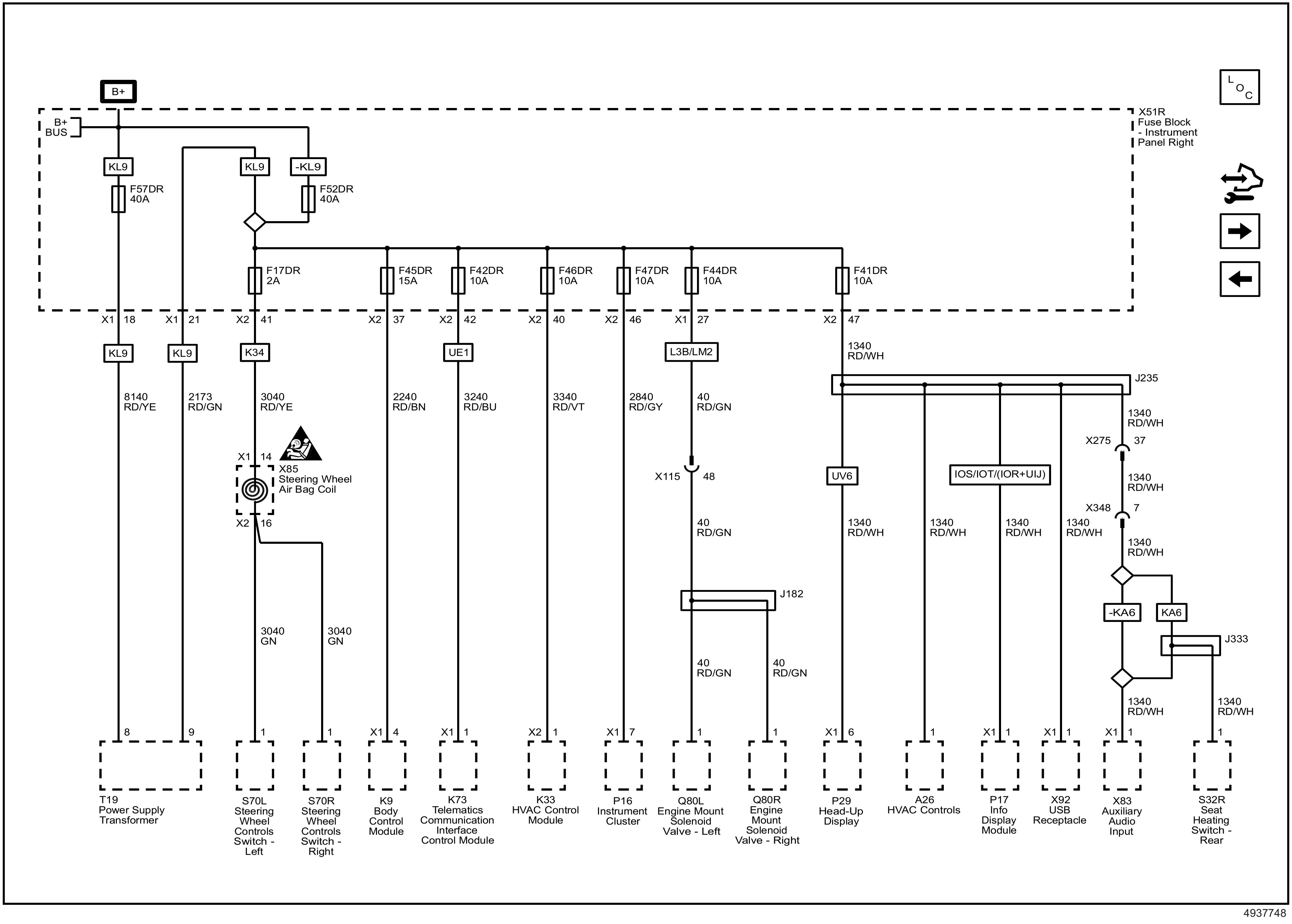
# Power Distribution Schematics (CB1DR and CB2DR Circuit Breakers, F26DR, F27DR, F28DR, 30DR. and F32DR Fuses)


4937744
L O C
X51R Fuse Block - Instrument Panel Right
B+
B+ BUS
KR76A Retained Accessory Power Relay 1
30
87
F26DR 10A
F27DR 50A
F28DR 50A
CB2DR 20A
CB1DR 20A
F32DR 10A
F30DR 10A
X1 8
X3 10
X1 6
X1 - 7 (Not Used)
X1 16
31
27
X2
X1 - 4 (Not Used)
X2 28
X1 5
K4C
D07/AZ3
D07/AZ3
JL1/J61
4601 VT
43 VT/YE
143 VT/YE
1040 RD/WH
4240 RD/BN
640 RD/WH
5140 RD/GN
4440 RD/GN
4440 RD/GN
-LM2
LM2
J211
43 VT/YE
43 VT/YE
X275 70
X115 34
43 VT/YE
43 VT/YE
X260 6
X2 40
K34 Glow Plug Control Module
X348 11
4601 VT
1
T22 Mobile Device Wireless Charger Module
X2 7
A98 Front Overhead Console Assembly
X348 9
AZ3
143 VT/YE
6
X92B USB Receptacle - Rear Seat
D07
143 VT/YE
1
X92C USB Receptacle - Center Console Rear
AZ3
1040 RD/WH
A
X80M Accessory Power Receptacle - Rear Seat
X348 15
D07
1040 RD/WH
A
X80L Accessory Power Receptacle - Center Console Rear
A
X80G Accessory Power Receptacle - Instrument Panel
16
X84 Data Link Connector
-JL1
J240
JL1
5140 RD/GN
1
B80 Park Brake Switch
5140 RD/GN
1
S76 Trailer Brake Control Switch
X1 9
K36 Inflatable Restraint Sensing and Diagnostic Module
X320 22
4440 RD/GN
1
K85 Passenger Presence Module

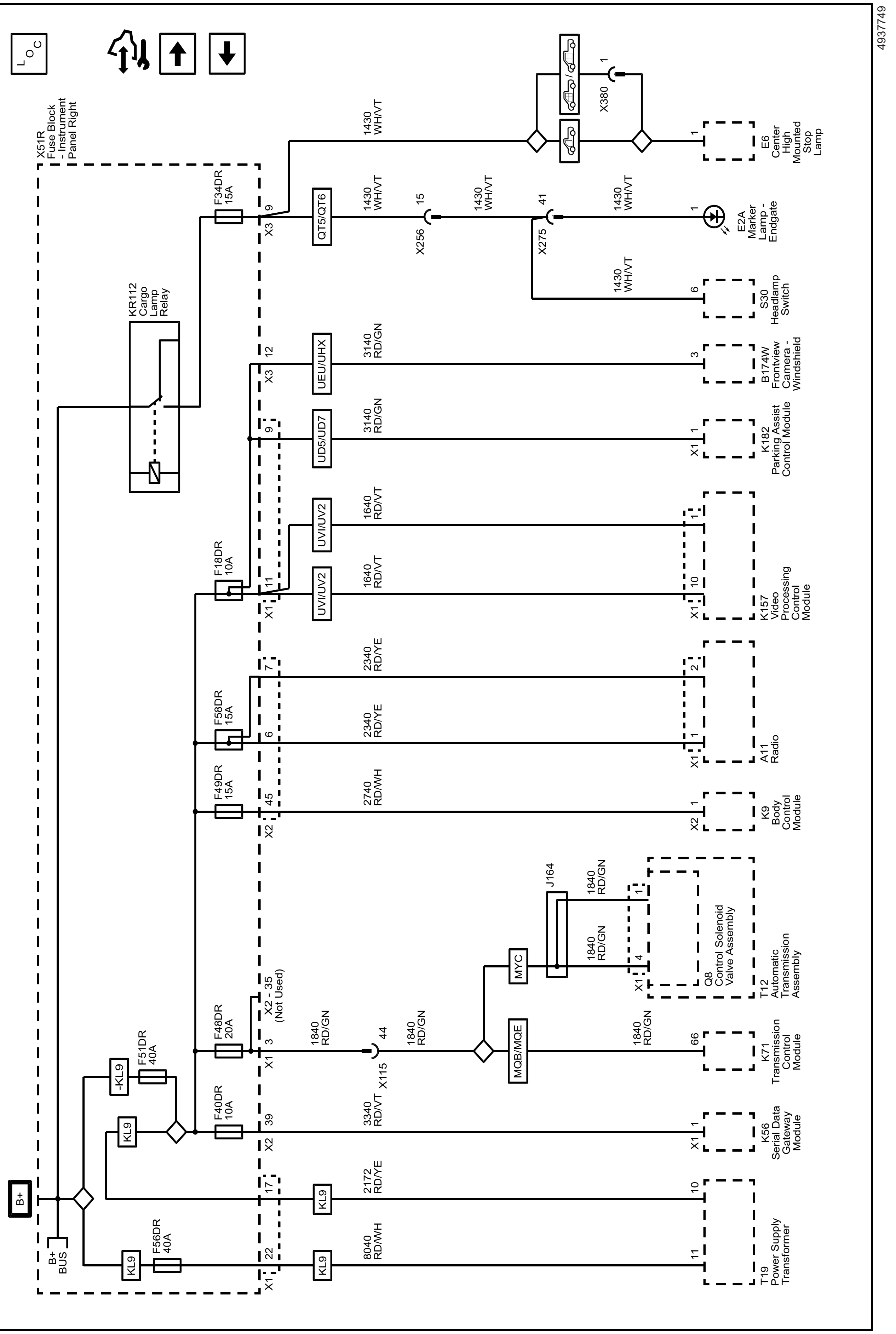
## Power Distribution Schematics (F20DR, F21DR, F22DR, F23DR, F24DR, and F25DR Fuses)


4937745
L O C
X51R Fuse Block - Instrument Panel Right
B+
B+ BUS
30
87
87A
KR73 Ignition Main Relay
F20DR 15A
F21DR 10A
F22DR 7.5A
F23DR 10A
F25DR 15A
F24DR 10A
X1 1
X2 10
X2 15
X1 13
X3 - 13 (Not Used)
12
X2 11
X2 - 20 (Not Used)
X1 - 2 (Not Used)
X2 19
15
BTM
KQV
KQV
KI3
UVC
KL9
C32
807 BU/VT
4939 VT/WH
X310
X320
21
J316
J331
1139 VT/WH
X1 21
X85 Steering Wheel Air Bag Coil
X2 9
1139 OG
1739 VT/GN
X138
1
X926
24
5
539 VT/GY
1639 VT/BK
J232
(UHX/UEU)-UV6
DD8/DRZ
1139 VT/WH
X1 2
X1 8
X2 23
X2 2
X2 3
3
6
K60 Steering Column Lock Module
M73C Seat Blower Motor - Driver Cushion
M73A Seat Blower Motor - Driver Back
M73B Seat Blower Motor - Passenger Back
M73D Seat Blower Motor - Passenger Cushion
K32 Steering Wheel Heating Control Module
B87 Rearview Camera
T19 Power Supply Transformer
E40 Electrical Auxiliary Heater
K56 Serial Data Gateway Module
P16 Instrument Cluster
P43 Collision Alert Indicators
A10 Inside Rearview Mirror
A98 Front Overhead Console Assembly

## Power Distribution Schematics (F17DR, F41DR, F42DR, F44DR, F45DR, F46DR, F47DR, F52DR, and F57DR Fuses)

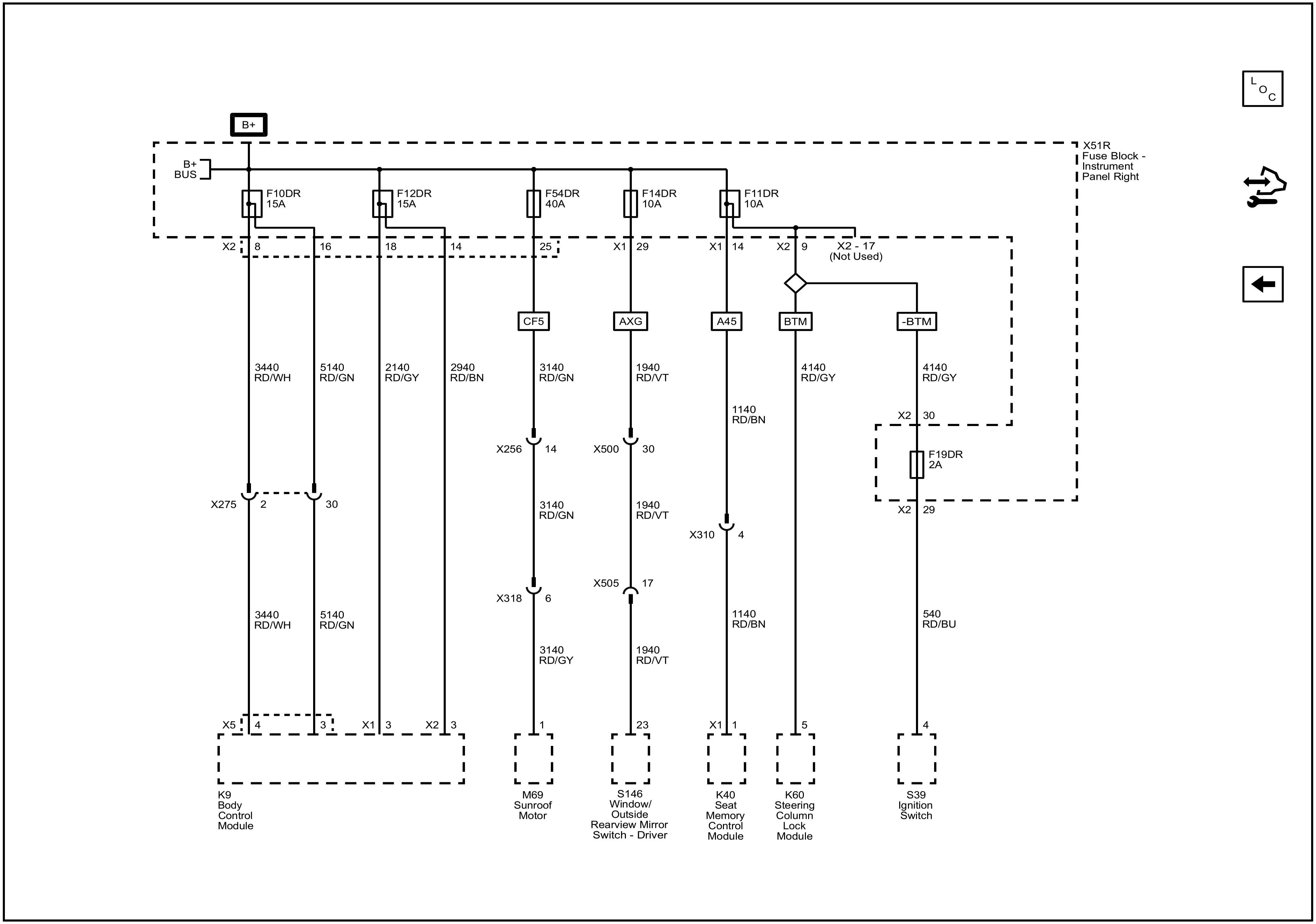

L O C
B+
B+ BUS
X51R Fuse Block - Instrument Panel Right
KL9
KL9
-KL9
F57DR 40A
F52DR 40A
F17DR 2A
F45DR 15A
F42DR 10A
F46DR 10A
F47DR 10A
F44DR 10A
F41DR 10A
X1 18
X1 21
X2 41
X2 37
X2 42
X2 40
X2 46
X1 27
X2 47
KL9
KL9
K34
UE1
L3B/LM2
8140 RD/YE
2173 RD/GN
3040 RD/YE
2240 RD/BN
3240 RD/BU
3340 RD/VT
2840 RD/GY
40 RD/GN
1340 RD/WH
J235
1340 RD/WH
X275 37
X1 14
X85 Steering Wheel Air Bag Coil
X2 16
X115 48
UV6
IOS/IOT/(IOR+UIJ)
1340 RD/WH
X348 7
40 RD/GN
1340 RD/WH
1340 RD/WH
1340 RD/WH
1340 RD/WH
1340 RD/WH
J182
-KA6
KA6
J333
3040 GN
3040 GN
40 RD/GN
40 RD/GN
1340 RD/WH
1340 RD/WH
8
9
1
1
X1 4
X1 1
X2 1
X1 7
1
1
X1 6
1
X1 1
X1 1
X1 1
1
T19 Power Supply Transformer
S70L Steering Wheel Controls Switch - Left
S70R Steering Wheel Controls Switch - Right
K9 Body Control Module
K73 Telematics Communication Interface Control Module
K33 HVAC Control Module
P16 Instrument Cluster
Q80L Engine Mount Solenoid Valve - Left
Q80R Engine Mount Solenoid Valve - Right
P29 Head-Up Display
A26 HVAC Controls
P17 Info Display Module
X92 USB Receptacle
X83 Auxiliary Audio Input
S32R Seat Heating Switch - Rear
4937748

# Power Distribution Schematics (F18DR, F34DR, F40DR, F48DR, F49DR, F51DR, F56DR, and F58DR Fuses)



B+
B+ BUS
X51R Fuse Block - Instrument Panel Right
KR112 Cargo Lamp Relay
KL9
-KL9
F56DR 40A
F51DR 40A
F40DR 10A
F48DR 20A
F49DR 15A
F58DR 15A
F18DR 10A
F34DR 15A
X1 22
X1 17
X2 39
X1 3
X2 - 35 (Not Used)
X2 45
6
7
X1 11
9
X3 12
X3 9
8040 RD/WH
2172 RD/YE
3340 RD/VT
1840 RD/GN
2740 RD/WH
2340 RD/YE
1640 RD/VT
3140 RD/GN
1430 WH/VT
X115
44
MQB/MQE
MYC
J164
UVI/UV2
UD5/UD7
UEU/UHX
QT5/QT6
X256
15
X275
41
X380
1
11
10
X1 1
66
X1 4
X2 1
X1 1
2
X1 10
1
3
6
T19 Power Supply Transformer
K56 Serial Data Gateway Module
K71 Transmission Control Module
Q8 Control Solenoid Valve Assembly
T12 Automatic Transmission Assembly
K9 Body Control Module
A11 Radio
K157 Video Processing Control Module
K182 Parking Assist Control Module
B174W Frontview Camera - Windshield
S30 Headlamp Switch
E2A Marker Lamp - Endgate
E6 Center High Mounted Stop Lamp
L O C
4937749

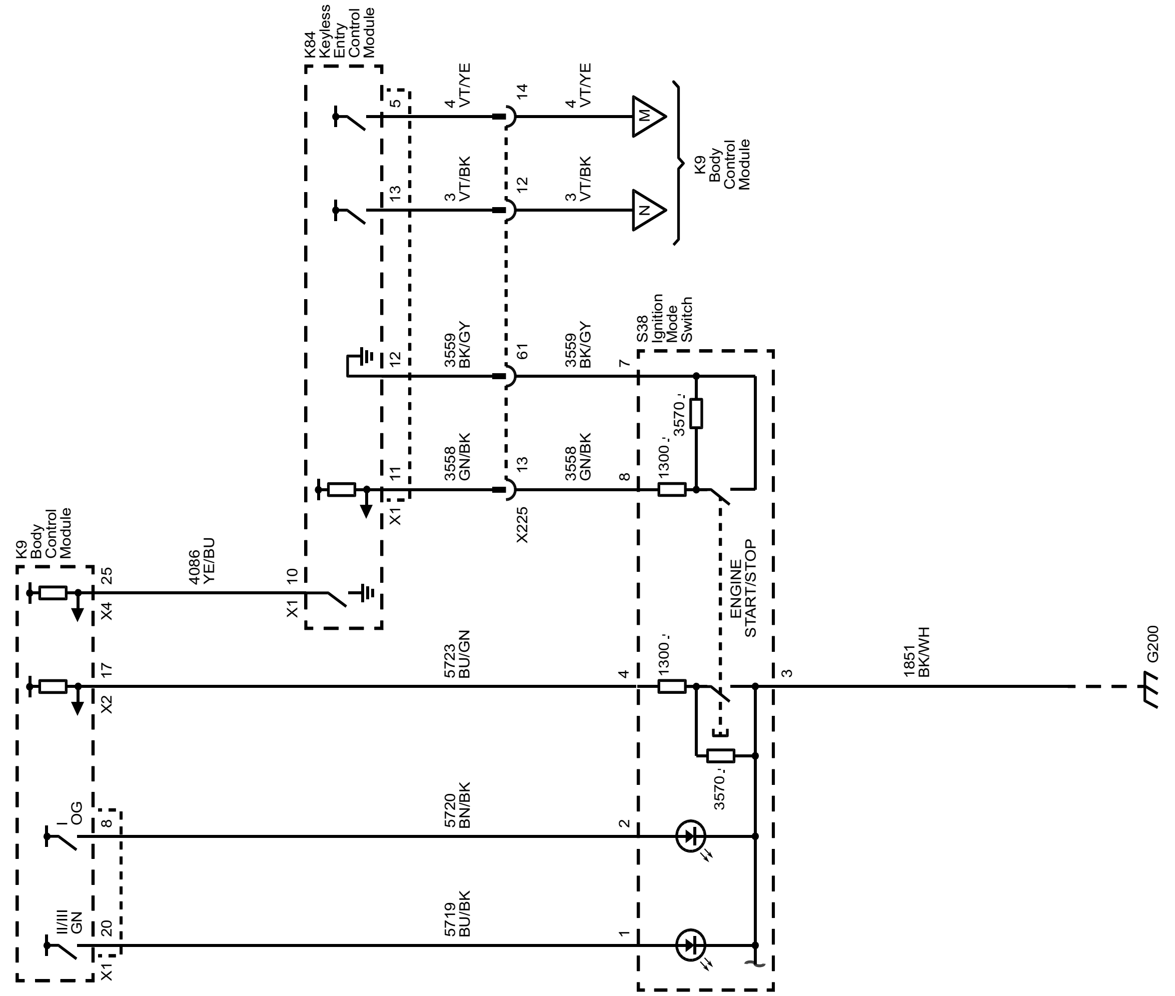
## Power Distribution Schematics (F10DR, F11DR, F12DR, F14DR, F19DR, and F54DR Fuses)


B+
B+ BUS
X51R Fuse Block - Instrument Panel Right
F10DR 15A
F12DR 15A
F54DR 40A
F14DR 10A
F11DR 10A
X2 8
16
18
14
25
X1 29
X1 14
X2 9
X2 - 17 (Not Used)
CF5
AXG
A45
BTM
-BTM
3440 RD/WH
5140 RD/GN
2140 RD/GY
2940 RD/BN
3140 RD/GN
1940 RD/VT
1140 RD/BN
4140 RD/GY
4140 RD/GY
X2 30
F19DR 2A
X2 29
X256 14
X500 30
X275 2
30
3140 RD/GN
1940 RD/VT
X310 4
X505 17
X318 6
3440 RD/WH
5140 RD/GN
1140 RD/BN
540 RD/BU
3140 RD/GY
1940 RD/VT
X5 4
3
X1 3
X2 3
1
23
X1 1
5
4
K9 Body Control Module
M69 Sunroof Motor
S146 Window/ Outside Rearview Mirror Switch - Driver
K40 Seat Memory Control Module
K60 Steering Column Lock Module
S39 Ignition Switch
L O C

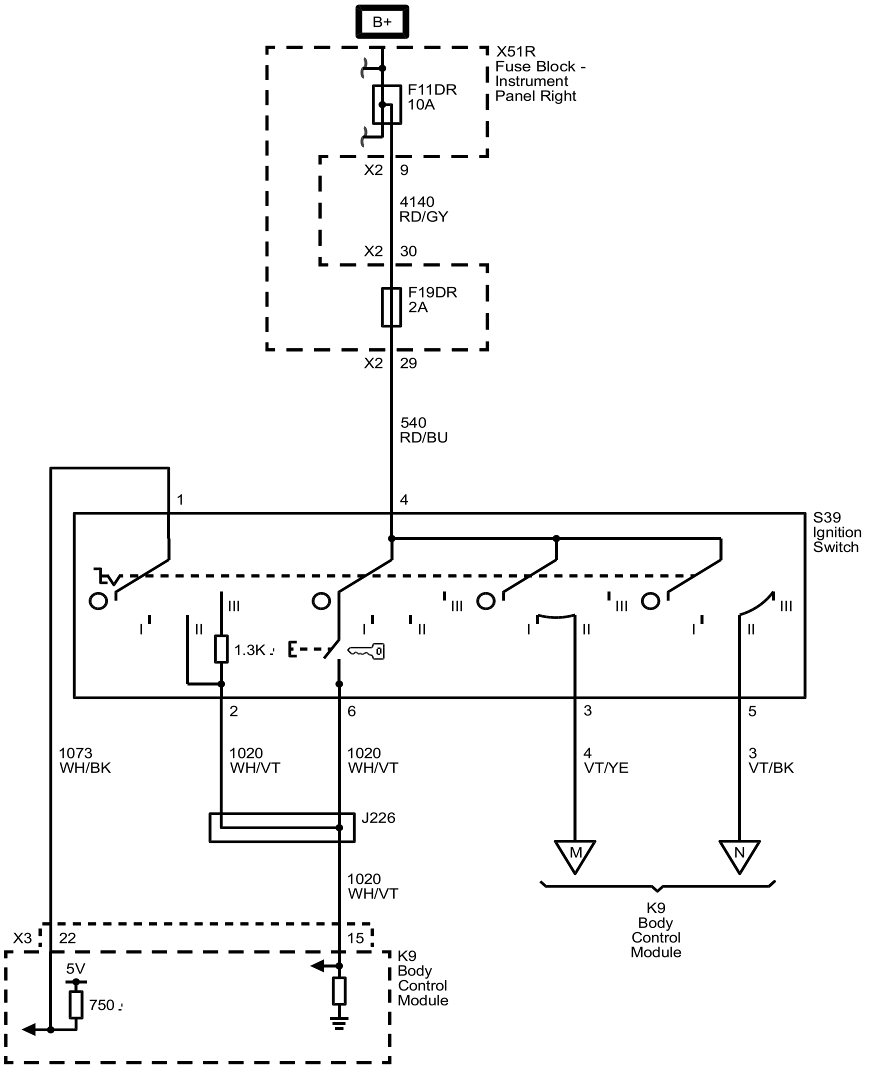
4937753

# Power Moding Schematics (Ignition Mode Switch (BTM))

5026212

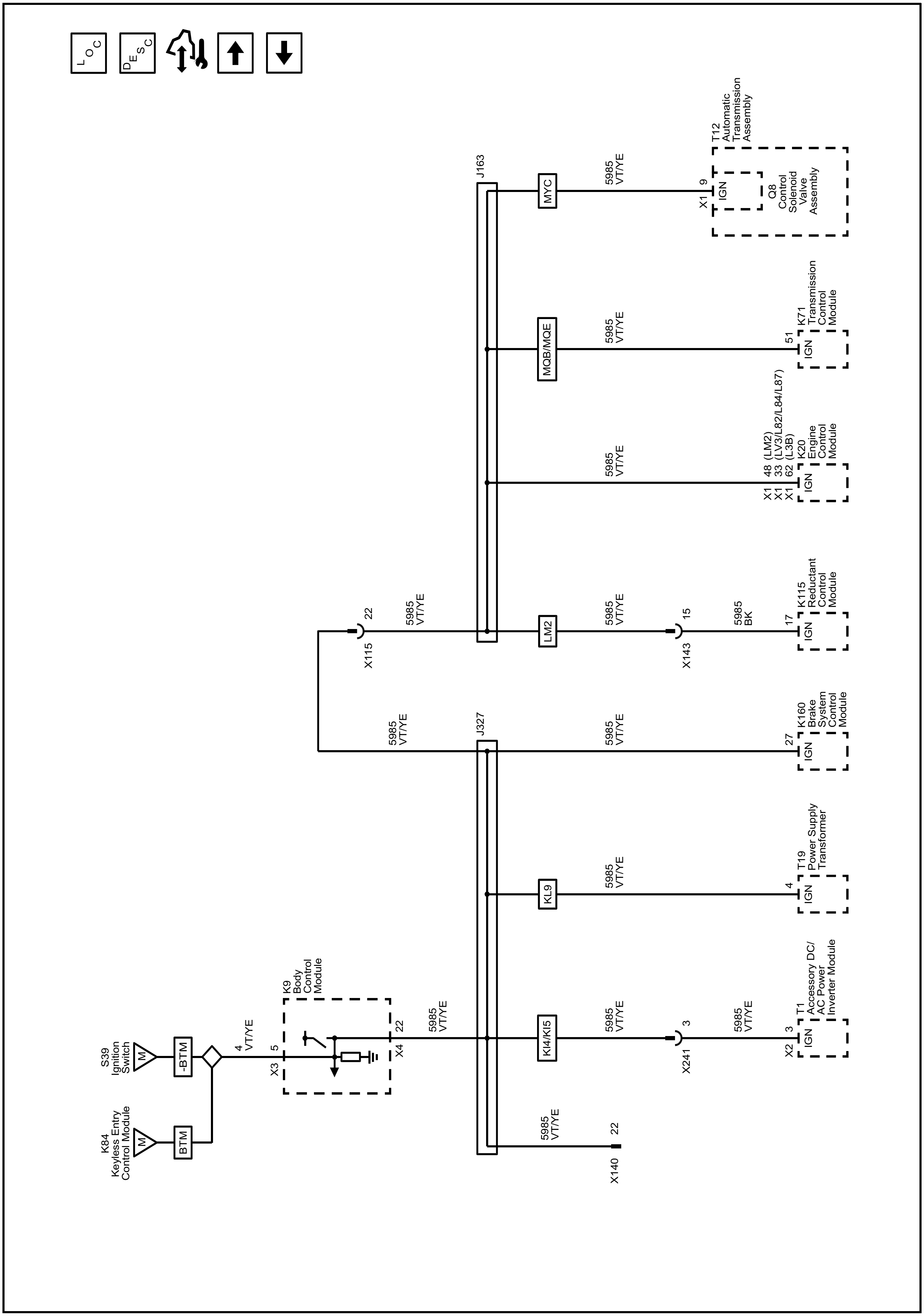

K84
Keyless
Entry
Control
Module
K9
Body
Control
Module
S38
Ignition
Mode
Switch
X1
X2
X4
X225
5
13
12
11
10
25
17
8
20
14
61
4
3
7
2
1
4
VT/YE
3
VT/BK
3559
BK/GY
3558
GN/BK
4086
YE/BU
5723
BU/GN
5720
BN/BK
5719
BU/BK
1851
BK/WH
M
N
I
OG
II/III
GN
1300
3570
ENGINE
START/STOP
G200

## Power Moding Schematics (Ignition Switch (without BTM))

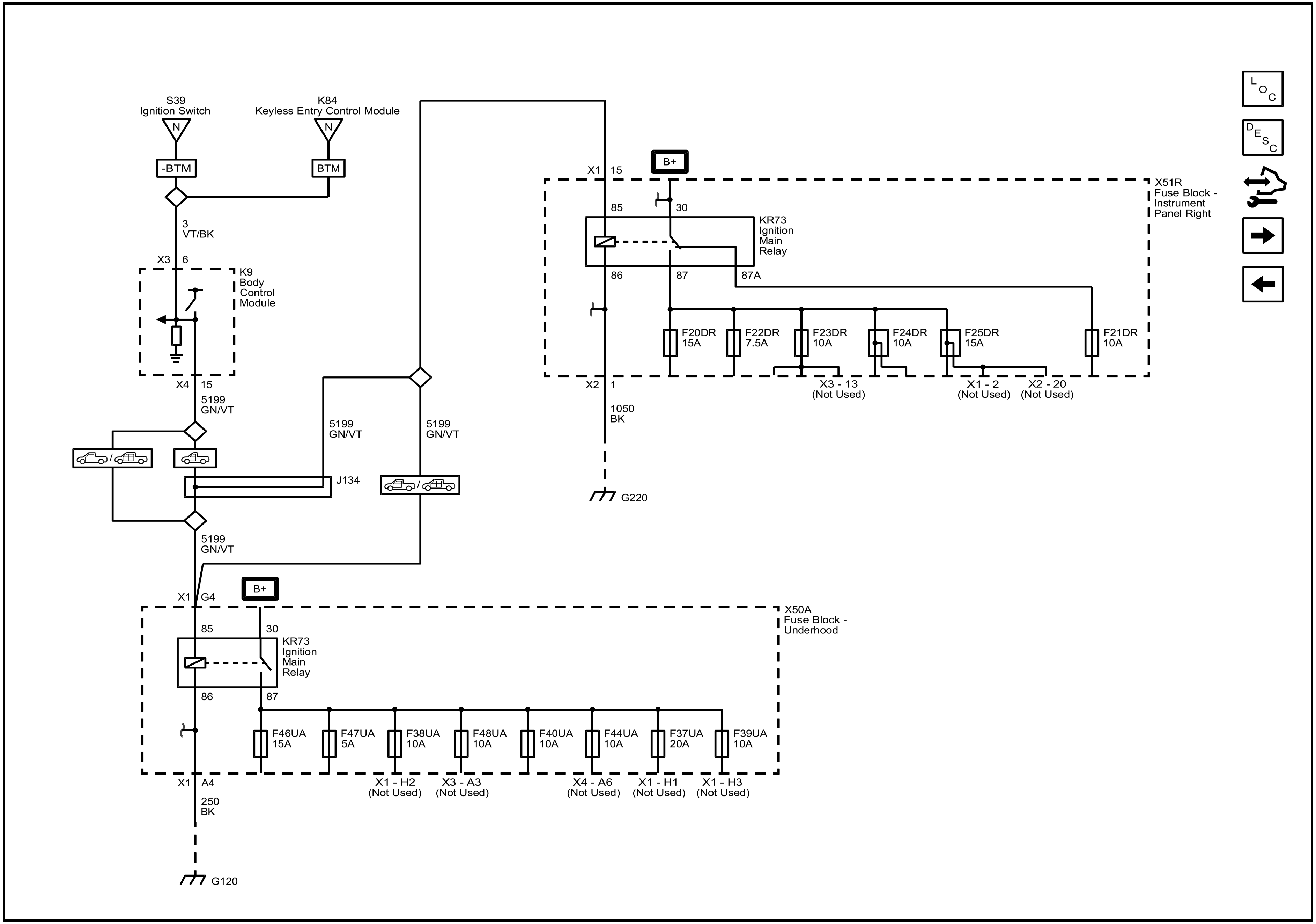

B+
X51R
Fuse Block -
Instrument
Panel Right
F11DR
10A
X2 9
4140
RD/GY
X2 30
F19DR
2A
X2 29
540
RD/BU
1
4
S39
Ignition
Switch
I
II
III
1.3K Ω
2
6
3
5
1073
WH/BK
1020
WH/VT
1020
WH/VT
4
VT/YE
3
VT/BK
J226
1020
WH/VT
M
N
K9
Body
Control
Module
X3 22
15
5V
750 Ω
K9
Body
Control
Module

5026213

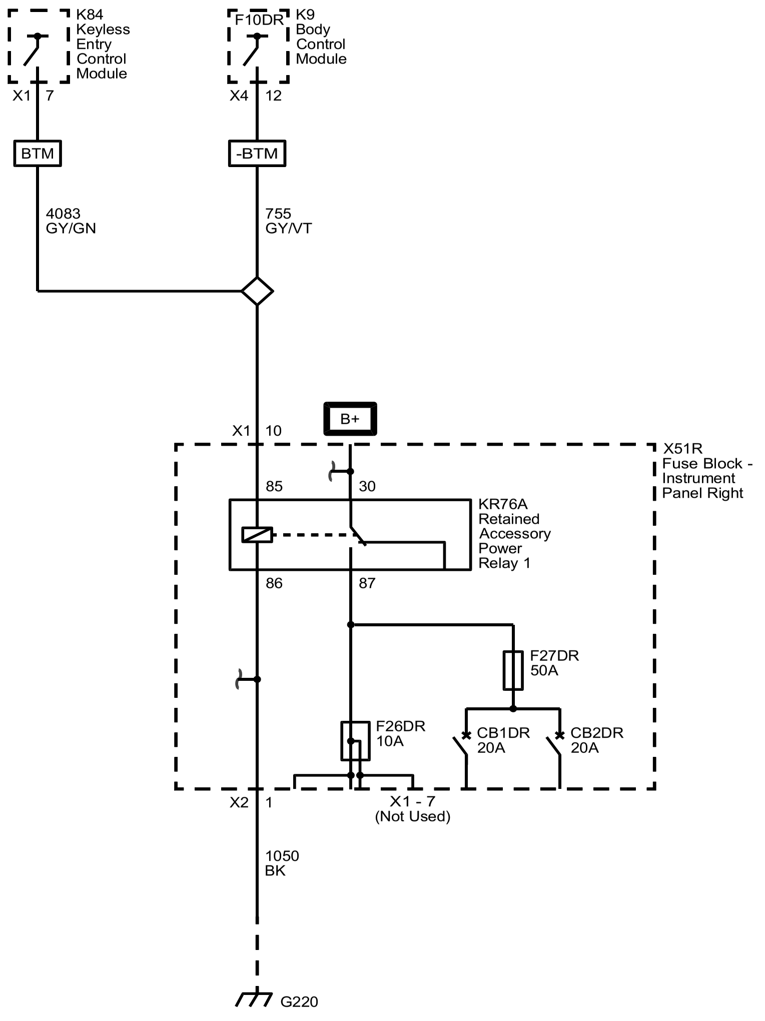
## Power Moding Schematics (Accessory Wakeup)


5026214
LOC
DESC
K84 Keyless Entry Control Module
M
BTM
S39 Ignition Switch
M
-BTM
4 VT/YE
X3 5
K9 Body Control Module
22 X4
5985 VT/YE
J327
X140 22
5985 VT/YE
KI4/KI5
5985 VT/YE
X241 3
5985 VT/YE
X2 3 IGN
T1 Accessory DC/AC Power Inverter Module
KL9
5985 VT/YE
4 IGN
T19 Power Supply Transformer
5985 VT/YE
27 IGN
K160 Brake System Control Module
5985 VT/YE
X115 22
5985 VT/YE
J163
LM2
5985 VT/YE
X143 15
5985 BK
17 IGN
K115 Reductant Control Module
5985 VT/YE
X1 48 (LM2)
X1 33 (LV3/L82/L84/L87)
X1 62 (L3B)
IGN
K20 Engine Control Module
MQB/MQE
5985 VT/YE
51 IGN
K71 Transmission Control Module
MYC
5985 VT/YE
X1 9 IGN
Q8 Control Solenoid Valve Assembly
T12 Automatic Transmission Assembly

## Power Moding Schematics (Ignition Main Relays)

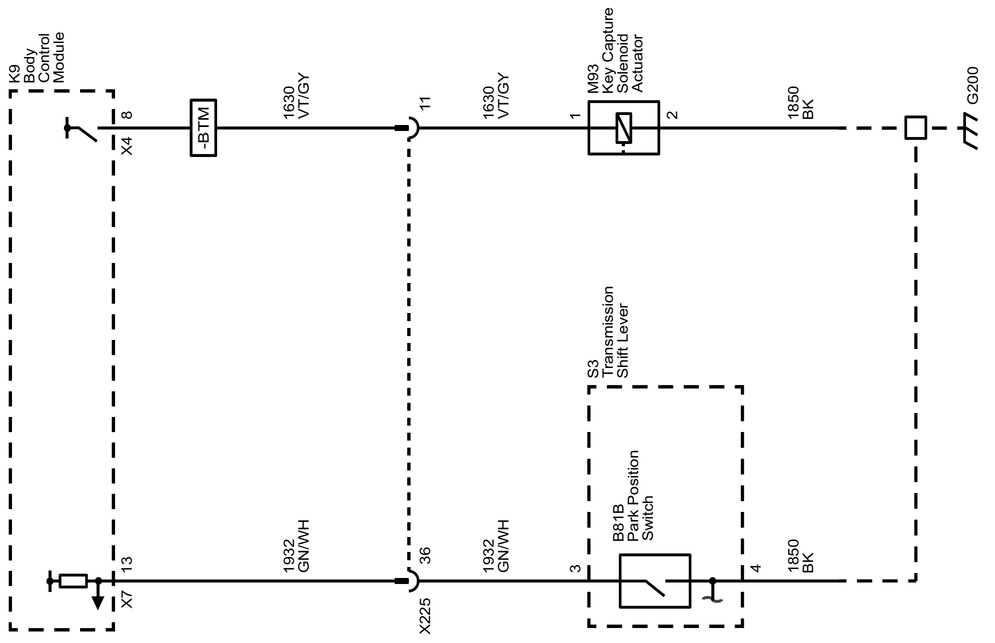

S39
Ignition Switch
N
-BTM
K84
Keyless Entry Control Module
N
BTM
3
VT/BK
X3 6
K9
Body
Control
Module
X4 15
5199
GN/VT
5199
GN/VT
5199
GN/VT
J134
5199
GN/VT
X1 G4
B+
85
30
KR73
Ignition
Main
Relay
86
87
X50A
Fuse Block -
Underhood
F46UA
15A
F47UA
5A
F38UA
10A
F48UA
10A
F40UA
10A
F44UA
10A
F37UA
20A
F39UA
10A
X1 A4
X1 - H2
(Not Used)
X3 - A3
(Not Used)
X4 - A6
(Not Used)
X1 - H1
(Not Used)
X1 - H3
(Not Used)
250
BK
G120
X1 15
B+
85
30
KR73
Ignition
Main
Relay
86
87
87A
X51R
Fuse Block -
Instrument
Panel Right
F20DR
15A
F22DR
7.5A
F23DR
10A
F24DR
10A
F25DR
15A
F21DR
10A
X2 1
X3 - 13
(Not Used)
X1 - 2
(Not Used)
X2 - 20
(Not Used)
1050
BK
G220
LOC
DESC
5026215

## Power Moding Schematics (Retained Accessory Power Relays)

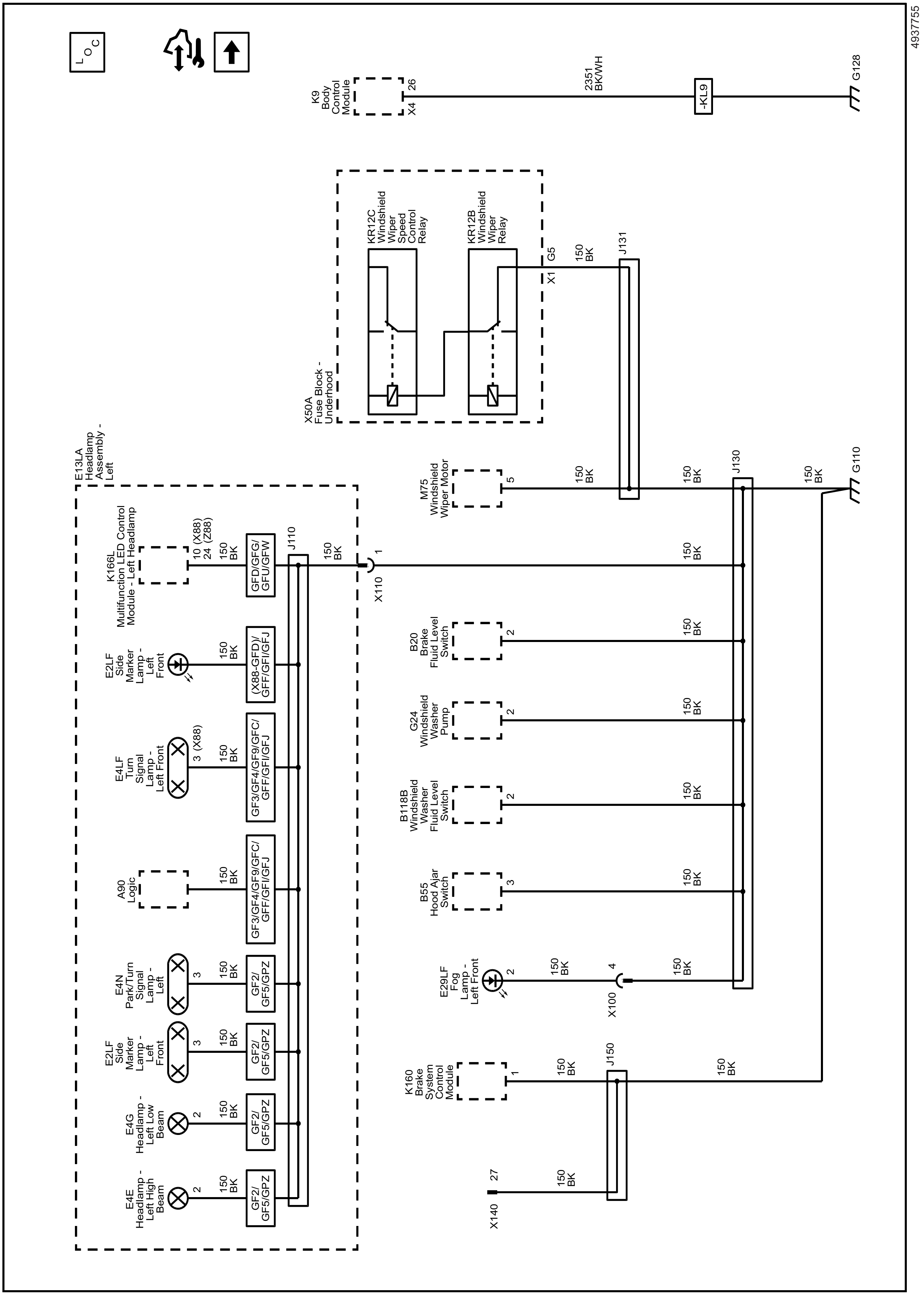

K84
Keyless
Entry
Control
Module
X1 7
BTM
4083
GY/GN
F10DR
K9
Body
Control
Module
X4 12
-BTM
755
GY/VT
B+
X1 10
85
30
X51R
Fuse Block -
Instrument
Panel Right
KR76A
Retained
Accessory
Power
Relay 1
86
87
F27DR
50A
F26DR
10A
CB1DR
20A
CB2DR
20A
X2 1
X1 - 7
(Not Used)
1050
BK
G220

5026216

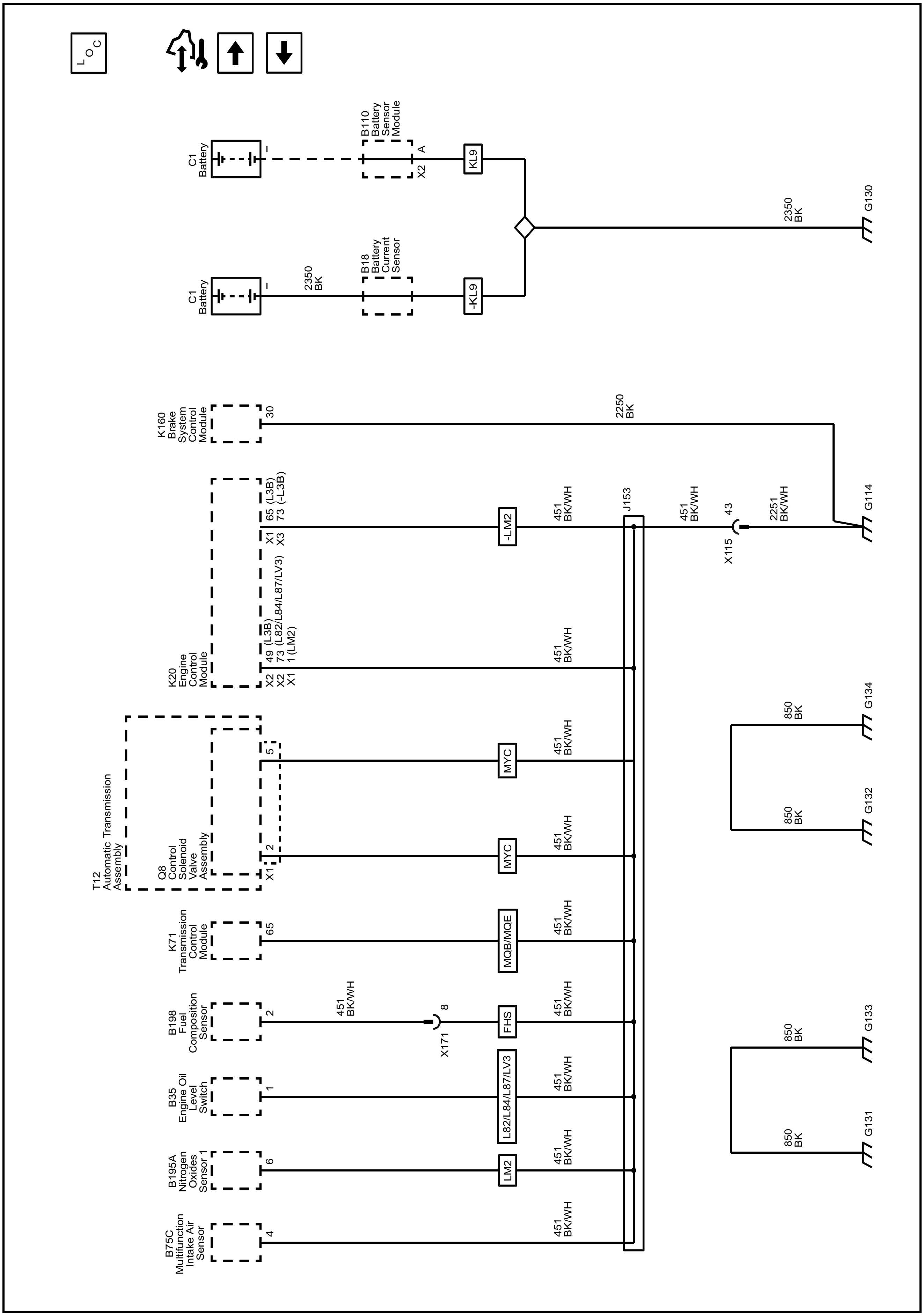
# Ignition Lock Schematics (Ignition Lock)


5026217
K9
Body
Control
Module
X4
8
-BTM
1630
VT/GY
11
1630
VT/GY
1
M93
Key Capture
Solenoid
Actuator
2
1850
BK
G200
X7
13
1932
GN/WH
X225
36
1932
GN/WH
S3
Transmission
Shift Lever
3
B81B
Park Position
Switch
4
1850
BK

# Ground Distribution Schematics (G110 and G128)

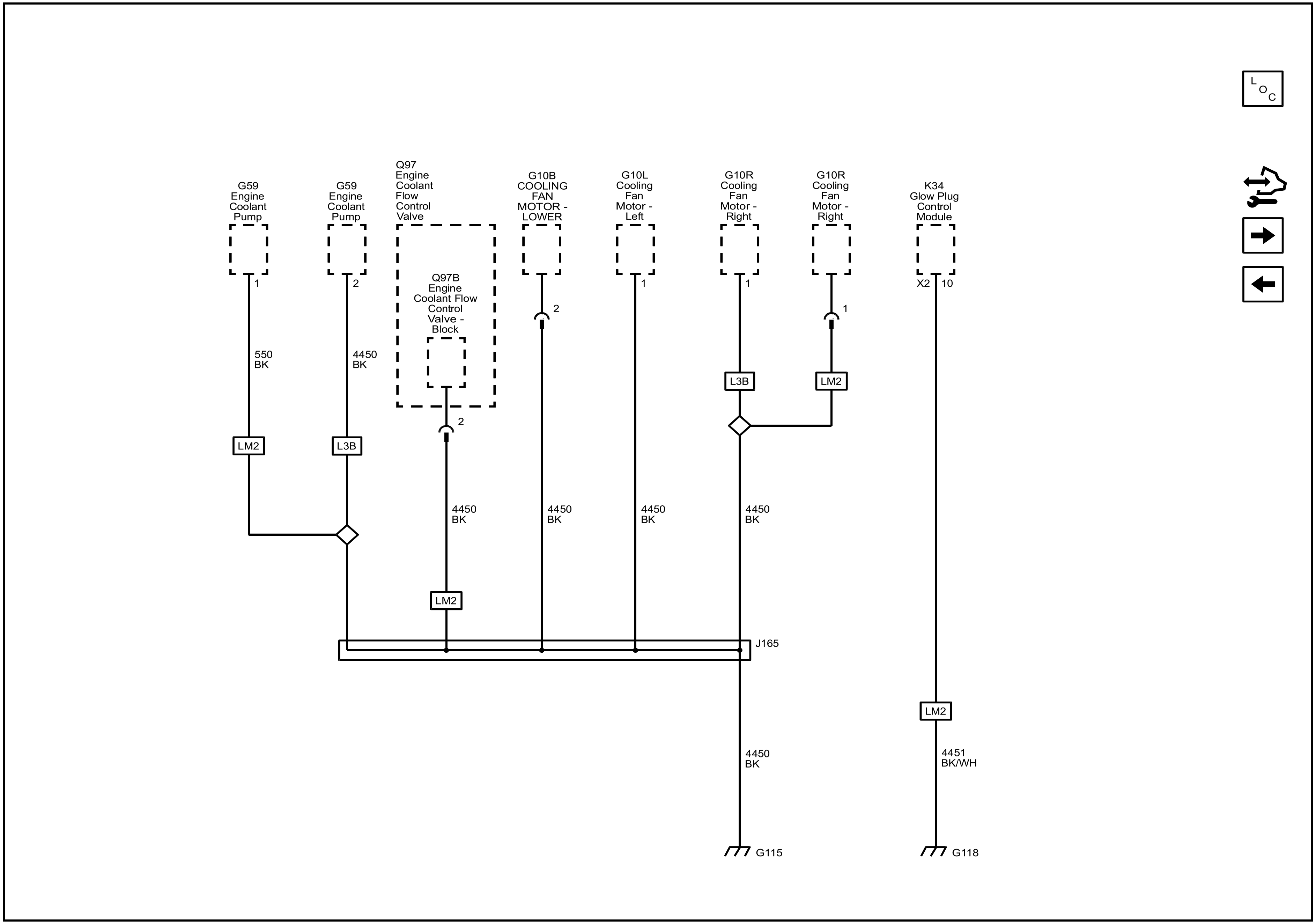

4937755
L O C
K9 Body Control Module
X4 26
2351 BK/WH
-KL9
G128
X50A Fuse Block - Underhood
KR12C Windshield Wiper Speed Control Relay
KR12B Windshield Wiper Relay
X1 G5
150 BK
J131
M75 Windshield Wiper Motor
5
150 BK
J130
150 BK
G110
E13LA Headlamp Assembly - Left
K166L Multifunction LED Control Module - Left Headlamp
10 (X88)
24 (Z88)
150 BK
GFD/GFG/GFU/GFW
J110
150 BK
1
X110
150 BK
E2LF Side Marker Lamp - Left Front
150 BK
(X88-GFD)/GFF/GFI/GFJ
B20 Brake Fluid Level Switch
2
150 BK
E4LF Turn Signal Lamp - Left Front
3 (X88)
150 BK
GF3/GF4/GF9/GFC/GFF/GFI/GFJ
G24 Windshield Washer Pump
2
150 BK
B118B Windshield Washer Fluid Level Switch
2
150 BK
A90 Logic
150 BK
GF3/GF4/GF9/GFC/GFF/GFI/GFJ
B55 Hood Ajar Switch
3
150 BK
E4N Park/Turn Signal Lamp - Left
3
150 BK
GF2/GF5/GPZ
E29LF Fog Lamp - Left Front
2
150 BK
4
X100
150 BK
E2LF Side Marker Lamp - Left Front
3
150 BK
GF2/GF5/GPZ
K160 Brake System Control Module
1
150 BK
J150
150 BK
E4G Headlamp - Left Low Beam
2
150 BK
GF2/GF5/GPZ
E4E Headlamp - Left High Beam
2
150 BK
GF2/GF5/GPZ
27
150 BK
X140

## Ground Distribution Schematics (G114, G130, G131, G132, G133, and G134)

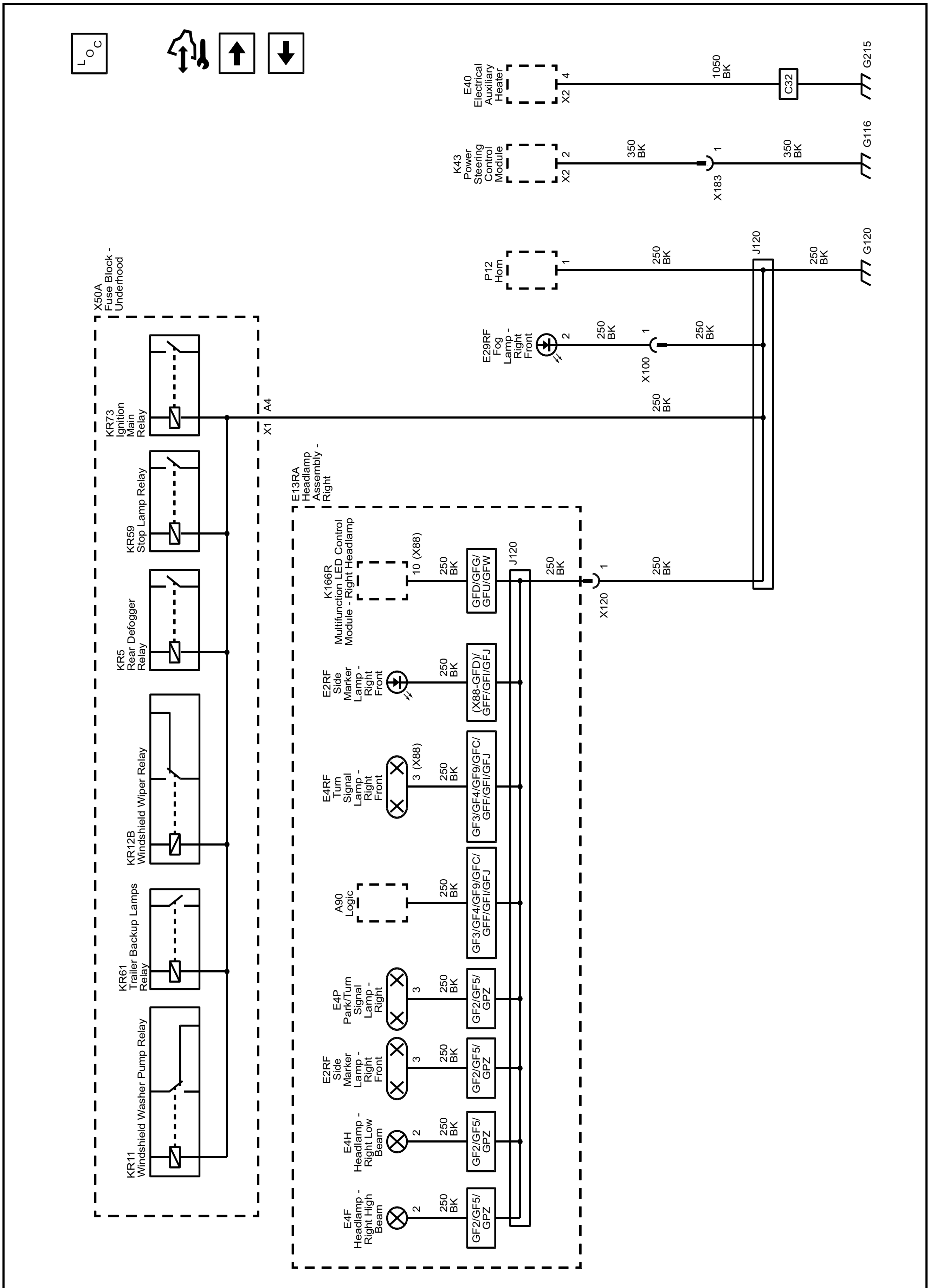


4937759
L O C
B75C Multifunction Intake Air Sensor
4
451 BK/WH
B195A Nitrogen Oxides Sensor 1
6
LM2
B35 Engine Oil Level Switch
1
L82/L84/L87/LV3
B198 Fuel Composition Sensor
2
X171
8
FHS
K71 Transmission Control Module
65
MQB/MQE
T12 Automatic Transmission Assembly
Q8 Control Solenoid Valve Assembly
X1
2
5
MYC
K20 Engine Control Module
X2 49 (L3B)
X2 73 (L82/L84/L87/LV3)
X1 1 (LM2)
X1 65 (L3B)
X3 73 (-L3B)
-LM2
J153
X115
43
2251 BK/WH
G114
K160 Brake System Control Module
30
2250 BK
850 BK
G131
G133
G132
G134
C1 Battery
–
2350 BK
B18 Battery Current Sensor
-KL9
B110 Battery Sensor Module
X2
A
KL9
G130

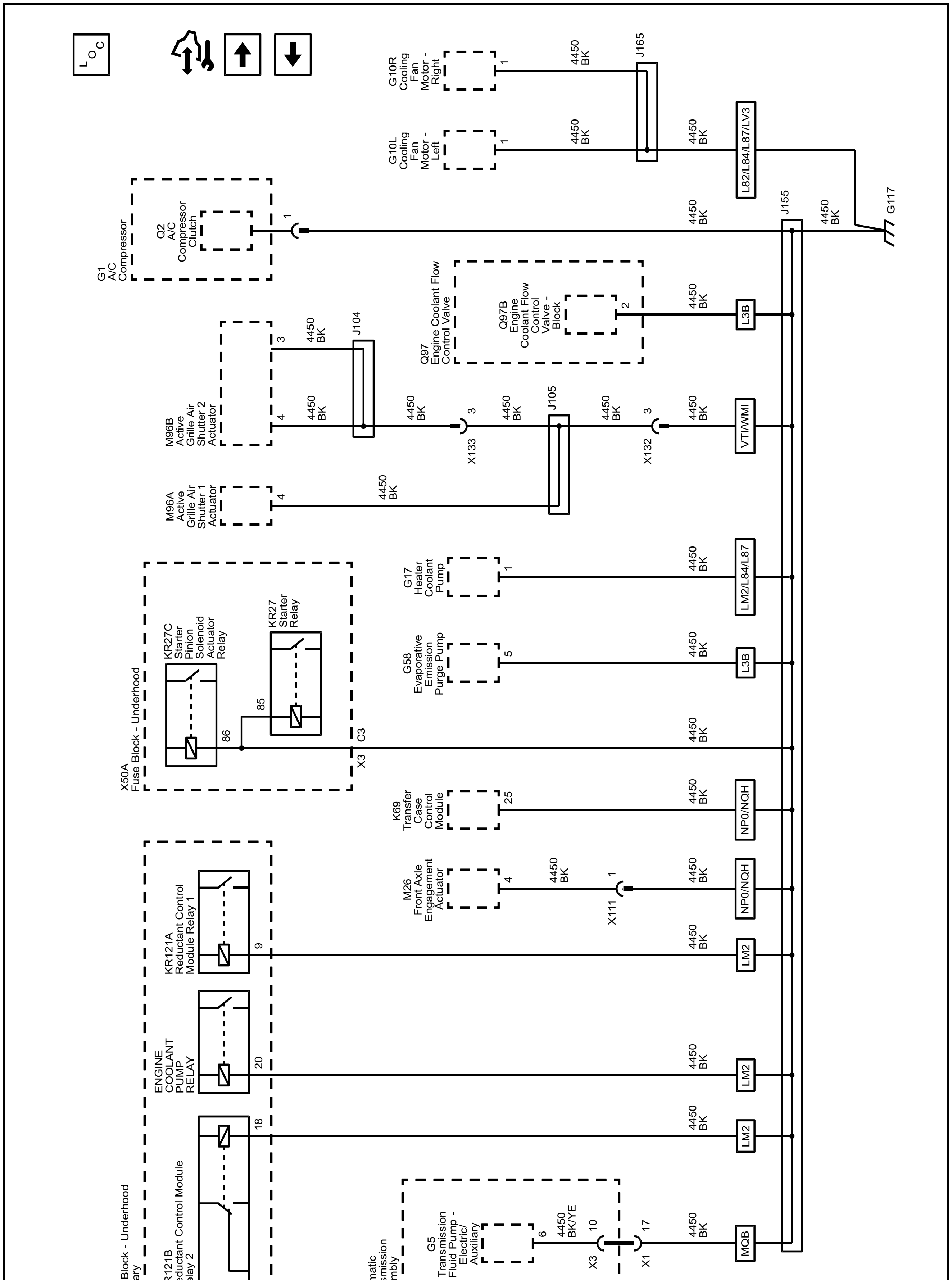
## Ground Distribution Schematics (G115 and G118 (L3B/LM2))


L O C
G59 Engine Coolant Pump
1
550 BK
LM2
G59 Engine Coolant Pump
2
4450 BK
L3B
Q97 Engine Coolant Flow Control Valve
Q97B Engine Coolant Flow Control Valve - Block
2
4450 BK
LM2
G10B COOLING FAN MOTOR - LOWER
2
4450 BK
G10L Cooling Fan Motor - Left
1
4450 BK
G10R Cooling Fan Motor - Right
1
L3B
4450 BK
G10R Cooling Fan Motor - Right
1
LM2
J165
4450 BK
G115
K34 Glow Plug Control Module
X2 10
LM2
4451 BK/WH
G118
4937761

## Ground Distribution Schematics (G116, G120, and G215)

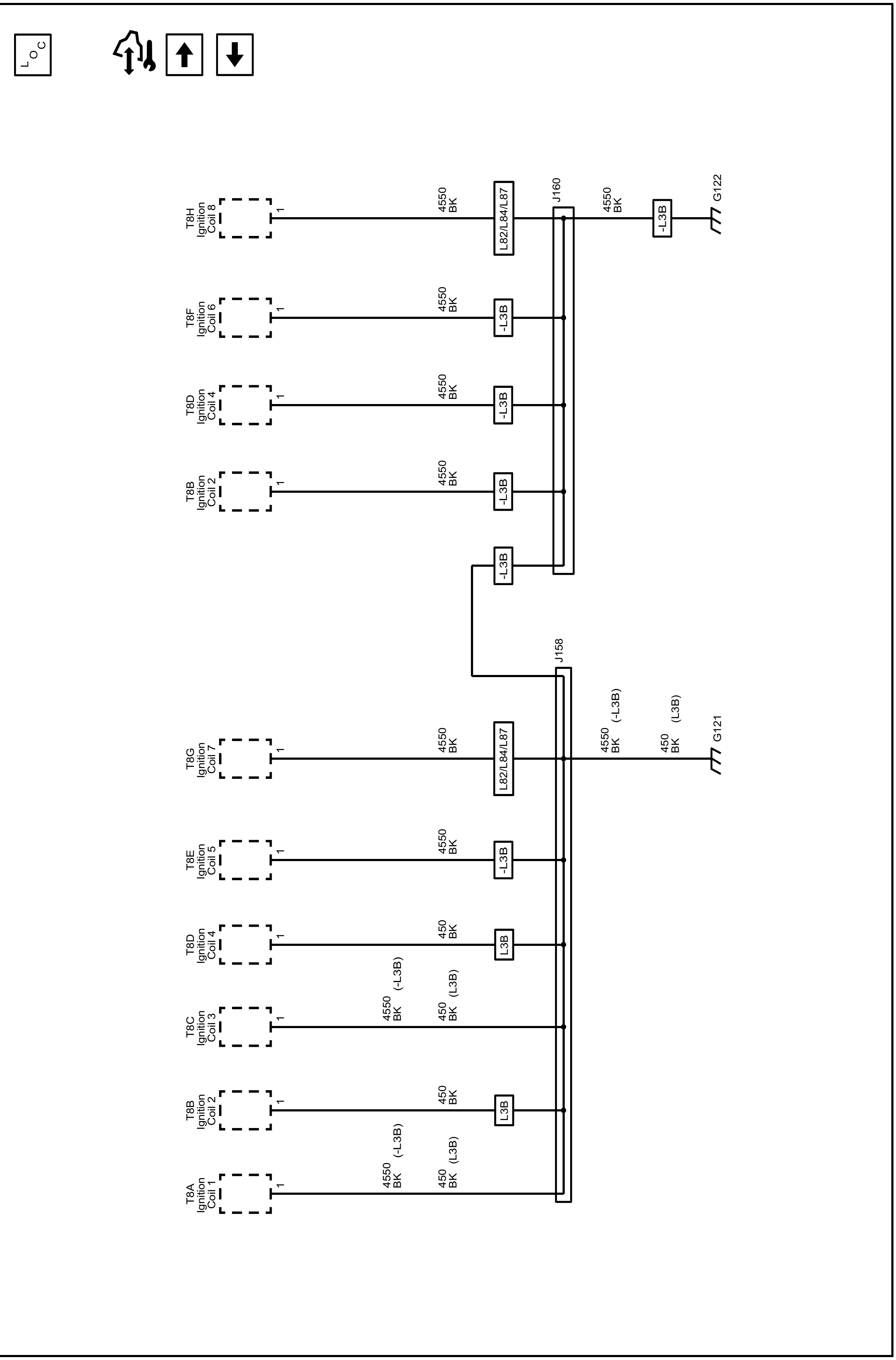

4937763
X50A
Fuse Block - Underhood
KR73
Ignition Main Relay
KR59
Stop Lamp Relay
KR5
Rear Defogger Relay
KR12B
Windshield Wiper Relay
KR61
Trailer Backup Lamps Relay
KR11
Windshield Washer Pump Relay
X1 A4
E13RA
Headlamp Assembly - Right
K166R
Multifunction LED Control Module - Right Headlamp
10 (X88)
E2RF
Side Marker Lamp - Right Front
E4RF
Turn Signal Lamp - Right Front
3 (X88)
A90
Logic
E4P
Park/Turn Signal Lamp - Right
E4H
Headlamp - Right Low Beam
E4F
Headlamp - Right High Beam
2
3
250
BK
GFD/GFG/GFU/GFW
(X88-GFD)/GFF/GFI/GFJ
GF3/GF4/GF9/GFC/GFF/GFI/GFJ
GF2/GF5/GPZ
J120
X120
1
E29RF
Fog Lamp - Right Front
X100
P12
Horn
G120
K43
Power Steering Control Module
X2 2
350
BK
X183
G116
E40
Electrical Auxiliary Heater
X2 4
1050
BK
C32
G215

## Ground Distribution Schematics (G117)


L O C
G10R Cooling Fan Motor - Right
G10L Cooling Fan Motor - Left
1
4450 BK
J165
L82/L84/L87/LV3
G117
G1 A/C Compressor
Q2 A/C Compressor Clutch
J155
M96B Active Grille Air Shutter 2 Actuator
3
4
J104
Q97 Engine Coolant Flow Control Valve
Q97B Engine Coolant Flow Control Valve - Block
2
L3B
X133
J105
X132
VTI/WMI
M96A Active Grille Air Shutter 1 Actuator
X50A Fuse Block - Underhood
KR27C Starter Pinion Solenoid Actuator Relay
KR27 Starter Relay
86
85
C3
X3
G17 Heater Coolant Pump
LM2/L84/L87
G58 Evaporative Emission Purge Pump
5
K69 Transfer Case Control Module
25
NP0/NQH
M26 Front Axle Engagement Actuator
X111
KR121A Reductant Control Module Relay 1
9
LM2
ENGINE COOLANT PUMP RELAY
20
X50B Fuse Block - Underhood Auxiliary
KR121B Reductant Control Module Relay 2
18
T12 Automatic Transmission Assembly
G5 Transmission Fluid Pump - Electric/ Auxiliary
6
4450 BK/YE
10
17
X1
MQB

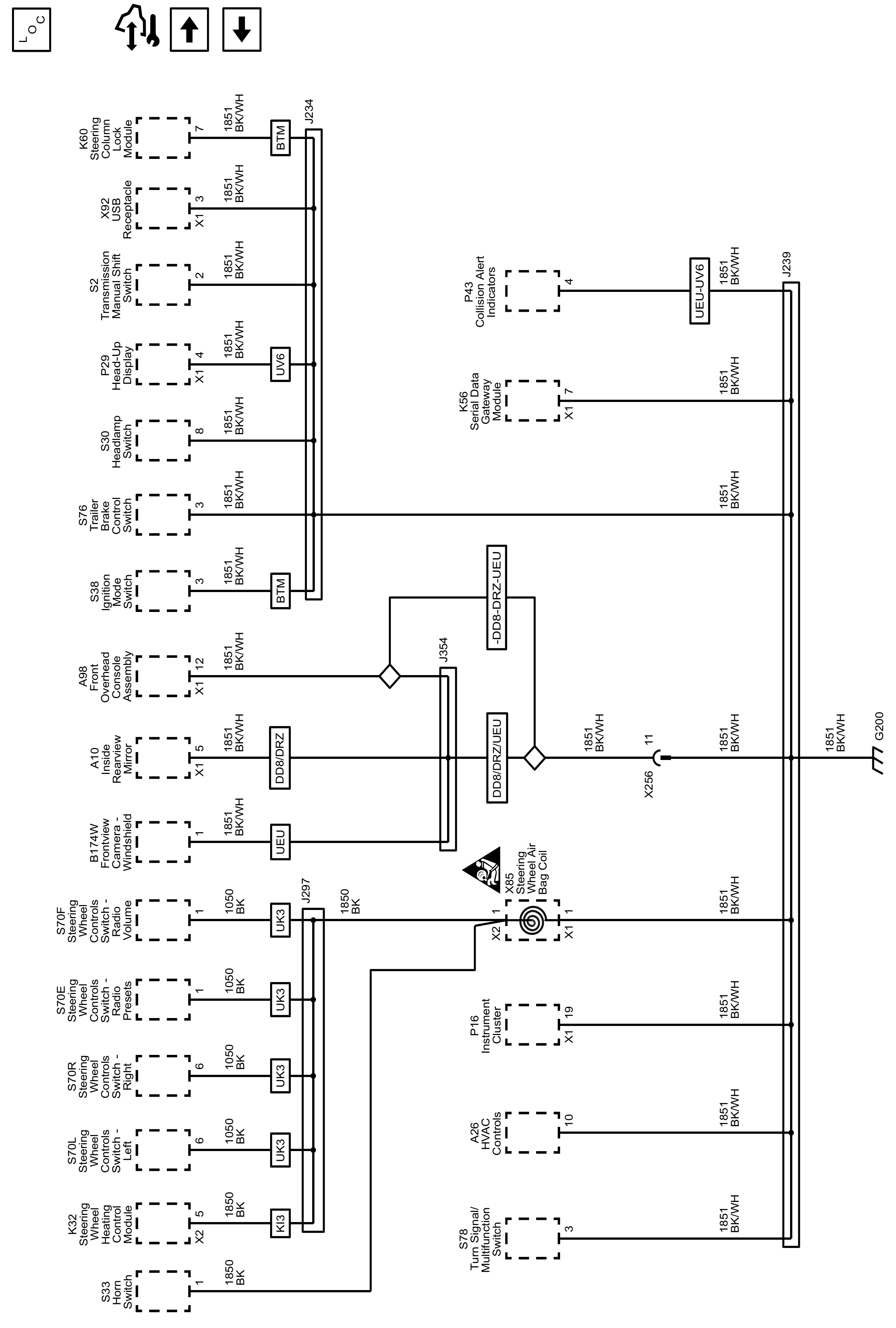
4937765

# Ground Distribution Schematics (G121 and G122 (-LM2))

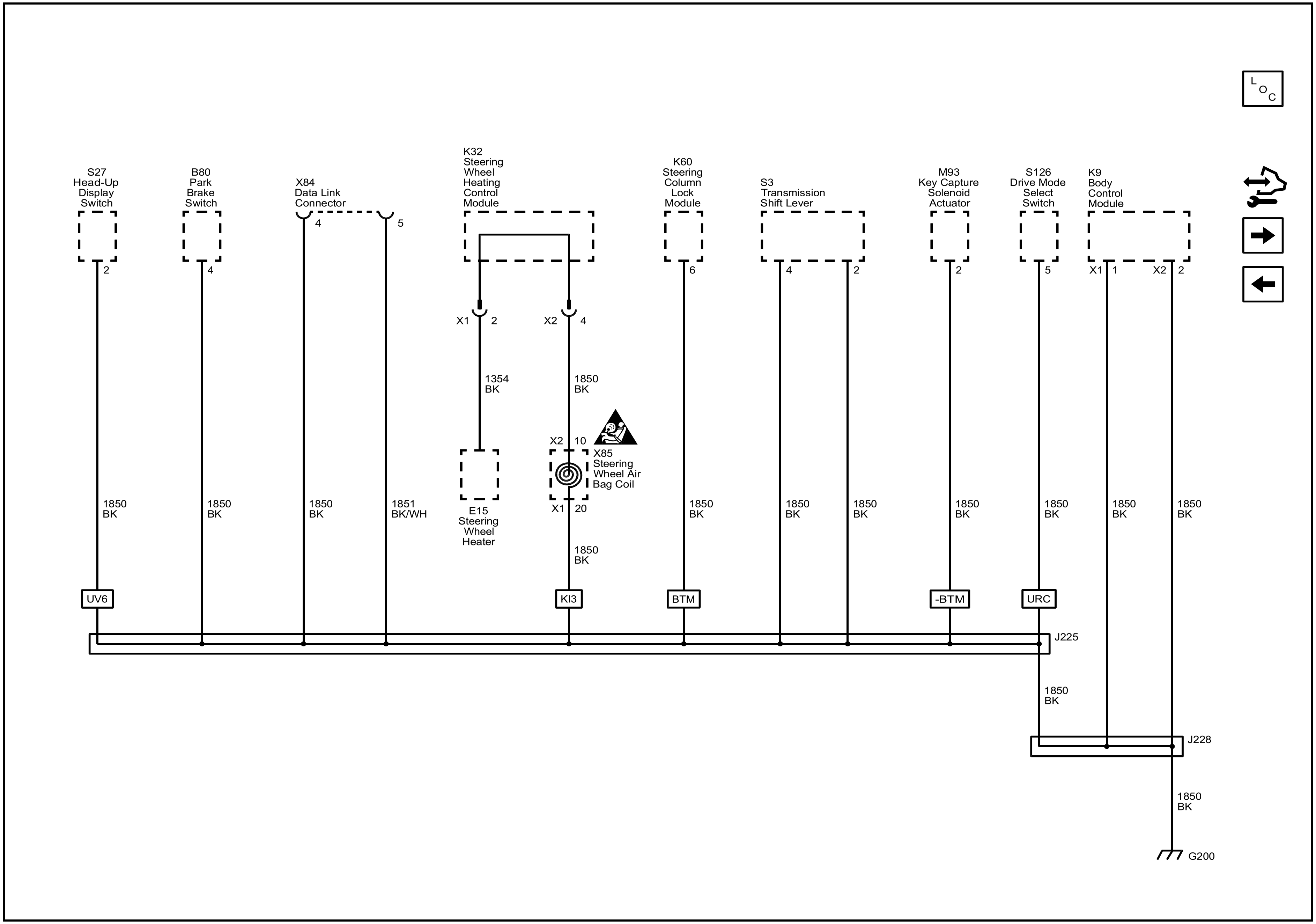

LOC
T8H Ignition Coil 8
1
4550 BK
L82/L84/L87
J160
4550 BK
-L3B
G122
T8F Ignition Coil 6
1
4550 BK
-L3B
T8D Ignition Coil 4
1
4550 BK
-L3B
T8B Ignition Coil 2
1
4550 BK
-L3B
-L3B
J158
T8G Ignition Coil 7
1
4550 BK
L82/L84/L87
4550 BK (-L3B)
450 BK (L3B)
G121
T8E Ignition Coil 5
1
4550 BK
-L3B
T8D Ignition Coil 4
1
450 BK
L3B
T8C Ignition Coil 3
1
4550 BK (-L3B)
450 BK (L3B)
T8B Ignition Coil 2
1
450 BK
L3B
T8A Ignition Coil 1
1
4550 BK (-L3B)
450 BK (L3B)

4937766

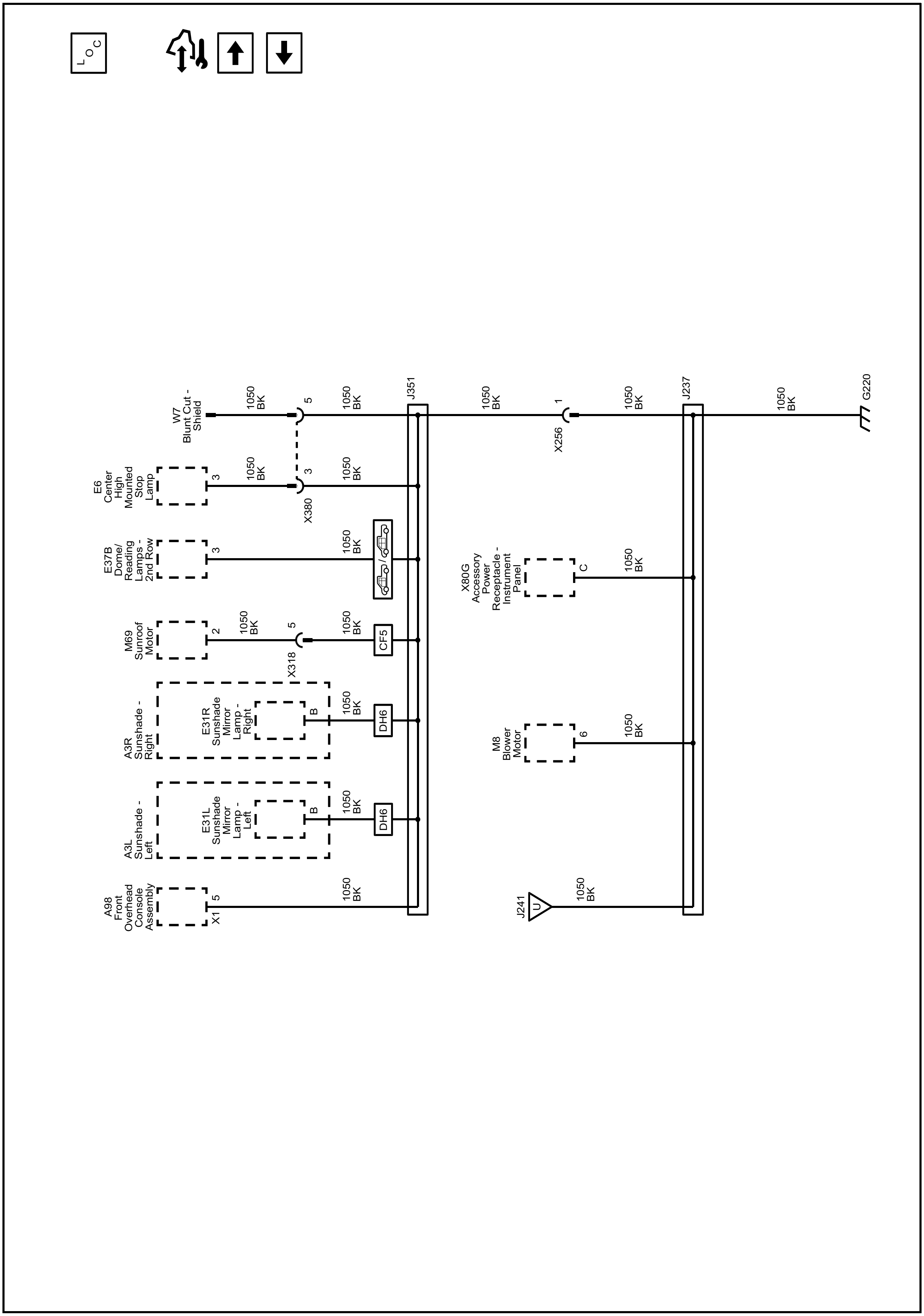
# Ground Distribution Schematics (G200 (1 of 2))


4937769
LOC
K60 Steering Column Lock Module
7
1851 BK/WH
BTM
J234
X92 USB Receptacle
X1 3
1851 BK/WH
S2 Transmission Manual Shift Switch
2
1851 BK/WH
P29 Head-Up Display
X1 4
1851 BK/WH
UV6
S30 Headlamp Switch
8
1851 BK/WH
S76 Trailer Brake Control Switch
3
1851 BK/WH
S38 Ignition Mode Switch
3
1851 BK/WH
BTM
A98 Front Overhead Console Assembly
X1 12
1851 BK/WH
J354
-DD8-DRZ-UEU
A10 Inside Rearview Mirror
X1 5
1851 BK/WH
DD8/DRZ
DD8/DRZ/UEU
B174W Frontview Camera - Windshield
1
1851 BK/WH
UEU
S70F Steering Wheel Controls Switch - Radio Volume
1
1050 BK
UK3
J297
1850 BK
S70E Steering Wheel Controls Switch - Radio Presets
1
1050 BK
UK3
S70R Steering Wheel Controls Switch - Right
6
1050 BK
UK3
S70L Steering Wheel Controls Switch - Left
6
1050 BK
UK3
K32 Steering Wheel Heating Control Module
X2 5
1850 BK
KI3
S33 Horn Switch
1
1850 BK
P43 Collision Alert Indicators
4
UEU-UV6
1851 BK/WH
J239
K56 Serial Data Gateway Module
X1 7
1851 BK/WH
1851 BK/WH
1851 BK/WH
11
X256
1851 BK/WH
1851 BK/WH
G200
X85 Steering Wheel Air Bag Coil
X2 1
X1 1
1851 BK/WH
P16 Instrument Cluster
X1 19
1851 BK/WH
A26 HVAC Controls
10
1851 BK/WH
S78 Turn Signal/ Multifunction Switch
3
1851 BK/WH

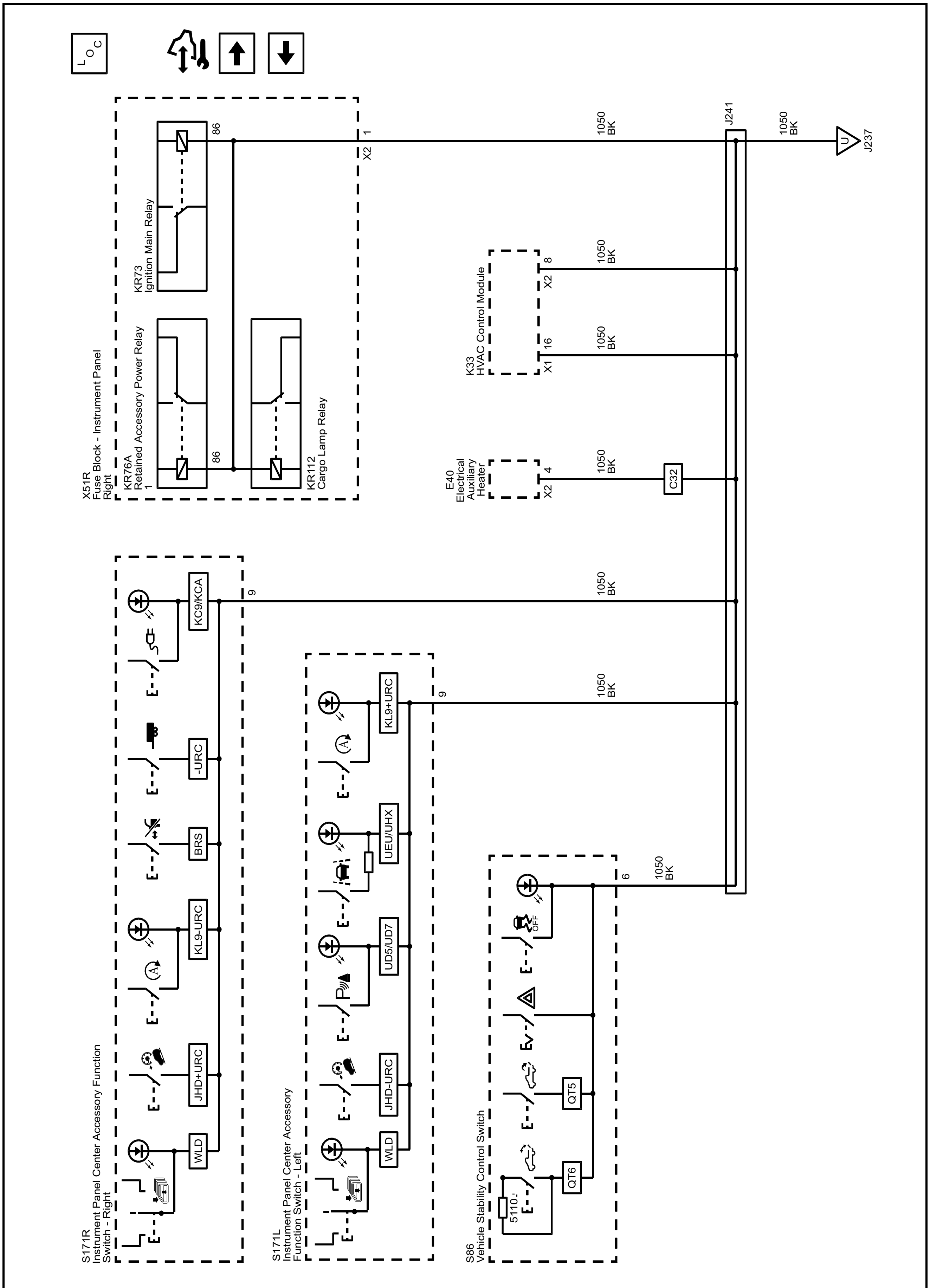
# Ground Distribution Schematics (G200 (2 of 2))


L O C
S27
Head-Up
Display
Switch
2
1850
BK
UV6
B80
Park
Brake
Switch
4
1850
BK
X84
Data Link
Connector
4
1850
BK
5
1851
BK/WH
K32
Steering
Wheel
Heating
Control
Module
X1 2
1354
BK
E15
Steering
Wheel
Heater
X2 4
1850
BK
X2 10
X85
Steering
Wheel Air
Bag Coil
X1 20
1850
BK
KI3
K60
Steering
Column
Lock
Module
6
1850
BK
BTM
S3
Transmission
Shift Lever
4
1850
BK
2
1850
BK
M93
Key Capture
Solenoid
Actuator
2
1850
BK
-BTM
S126
Drive Mode
Select
Switch
5
1850
BK
URC
K9
Body
Control
Module
X1 1
1850
BK
X2 2
1850
BK
J225
1850
BK
J228
1850
BK
G200
4937770

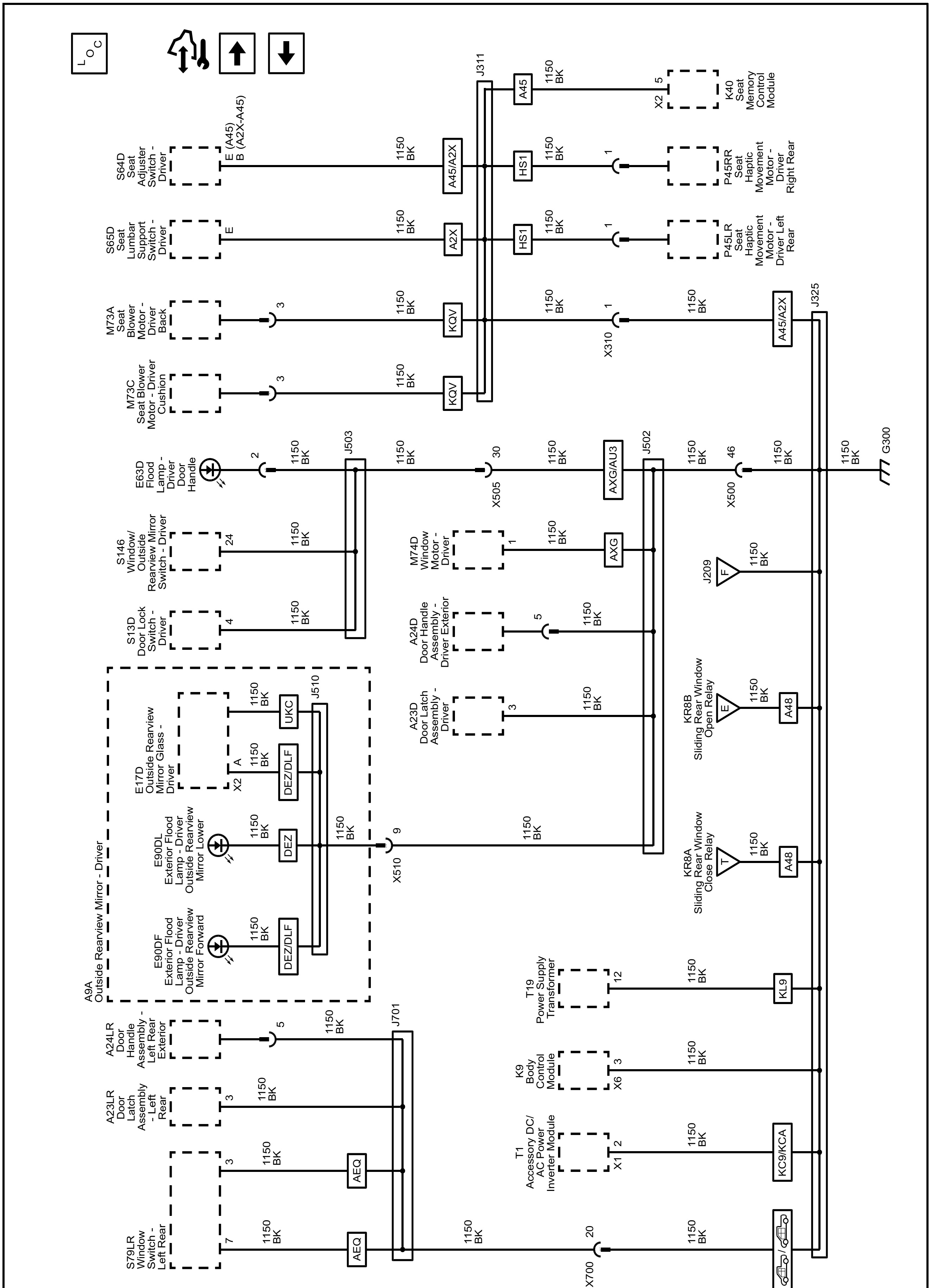
## Ground Distribution Schematics (G220 (1 of 2))


4937771
LOC
A98 Front Overhead Console Assembly
X1 5
1050 BK
A3L Sunshade - Left
E31L Sunshade Mirror Lamp - Left
B
1050 BK
DH6
A3R Sunshade - Right
E31R Sunshade Mirror Lamp - Right
B
1050 BK
DH6
M69 Sunroof Motor
2
1050 BK
5
X318
1050 BK
CF5
E37B Dome/ Reading Lamps - 2nd Row
3
1050 BK
E6 Center High Mounted Stop Lamp
3
1050 BK
3
X380
1050 BK
W7 Blunt Cut - Shield
1050 BK
5
1050 BK
J351
1050 BK
1
X256
1050 BK
J237
1050 BK
G220
X80G Accessory Power Receptacle - Instrument Panel
C
1050 BK
M8 Blower Motor
6
1050 BK
J241
U
1050 BK

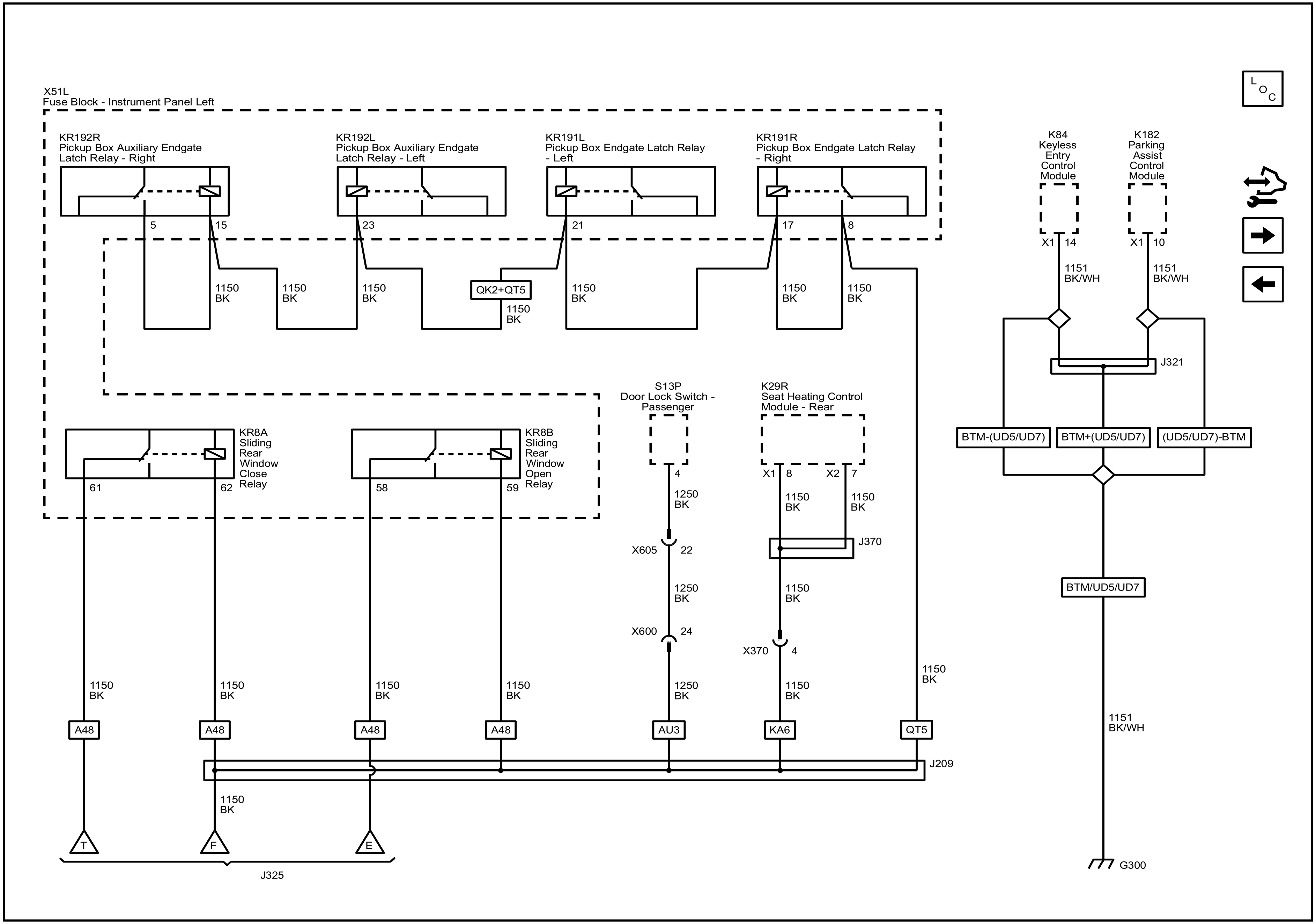
# Ground Distribution Schematics (G220 (2 of 2))


5079783
L O C
X51R
Fuse Block - Instrument Panel
Right
KR76A
Retained Accessory Power Relay
1
86
KR73
Ignition Main Relay
86
X2 1
KR112
Cargo Lamp Relay
1050
BK
J241
1050
BK
U
J237
K33
HVAC Control Module
X2 8
1050
BK
X1 16
1050
BK
E40
Electrical
Auxiliary
Heater
X2 4
1050
BK
C32
S171R
Instrument Panel Center Accessory Function
Switch - Right
KC9/KCA
-URC
BRS
KL9-URC
JHD+URC
WLD
9
1050
BK
S171L
Instrument Panel Center Accessory
Function Switch - Left
KL9+URC
UEU/UHX
UD5/UD7
JHD-URC
WLD
9
1050
BK
S86
Vehicle Stability Control Switch
5110
OFF
QT5
QT6
6
1050
BK

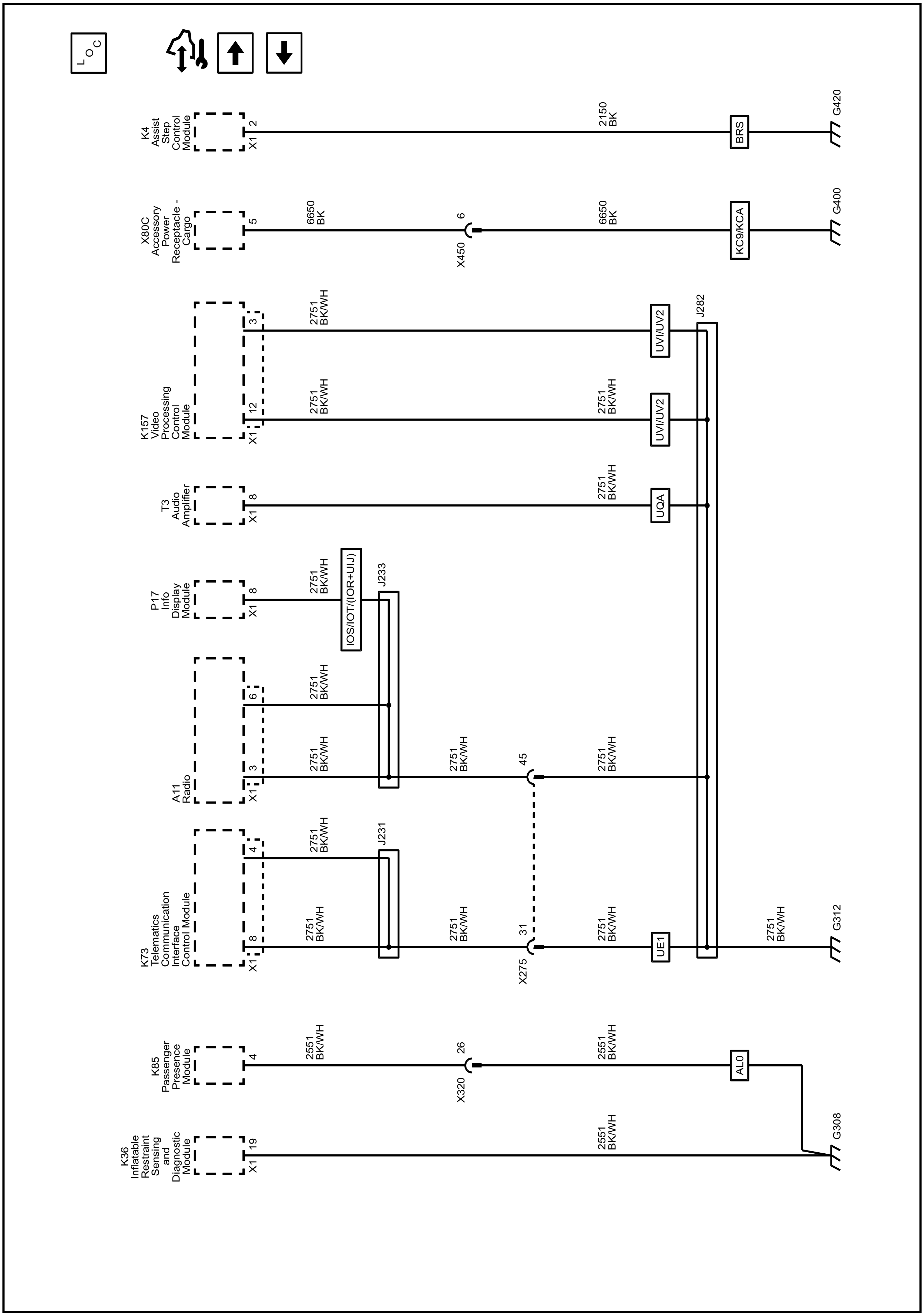
## Ground Distribution Schematics (G300 (1 of 2))


4937774
L O C
S64D Seat Adjuster Switch - Driver
E (A45)
B (A2X-A45)
S65D Seat Lumbar Support Switch - Driver
E
M73A Seat Blower Motor - Driver Back
3
M73C Seat Blower Motor - Driver Cushion
3
E63D Flood Lamp - Driver Door Handle
2
S146 Window/ Outside Rearview Mirror Switch - Driver
24
S13D Door Lock Switch - Driver
4
A9A Outside Rearview Mirror - Driver
E17D Outside Rearview Mirror Glass - Driver
X2
A
UKC
DEZ/DLF
E90DL Exterior Flood Lamp - Driver Outside Rearview Mirror Lower
DEZ
E90DF Exterior Flood Lamp - Driver Outside Rearview Mirror Forward
DEZ/DLF
J510
X510
9
A24LR Door Handle Assembly - Left Rear Exterior
5
A23LR Door Latch Assembly - Left Rear
3
S79LR Window Switch - Left Rear
3
7
AEQ
AEQ
J701
X700
20
J311
A45/A2X
A2X
KQV
KQV
A45
HS1
HS1
K40 Seat Memory Control Module
X2
5
P45RR Seat Haptic Movement Motor - Driver Right Rear
1
P45LR Seat Haptic Movement Motor - Driver Left Rear
1
X310
1
A45/A2X
J325
J503
X505
30
AXG/AU3
J502
X500
46
G300
M74D Window Motor - Driver
1
AXG
A24D Door Handle Assembly - Driver Exterior
5
A23D Door Latch Assembly - Driver
3
J209
F
KR8B Sliding Rear Window Open Relay
E
A48
KR8A Sliding Rear Window Close Relay
T
A48
T19 Power Supply Transformer
12
KL9
K9 Body Control Module
X6
3
T1 Accessory DC/ AC Power Inverter Module
X1
2
KC9/KCA
1150
BK

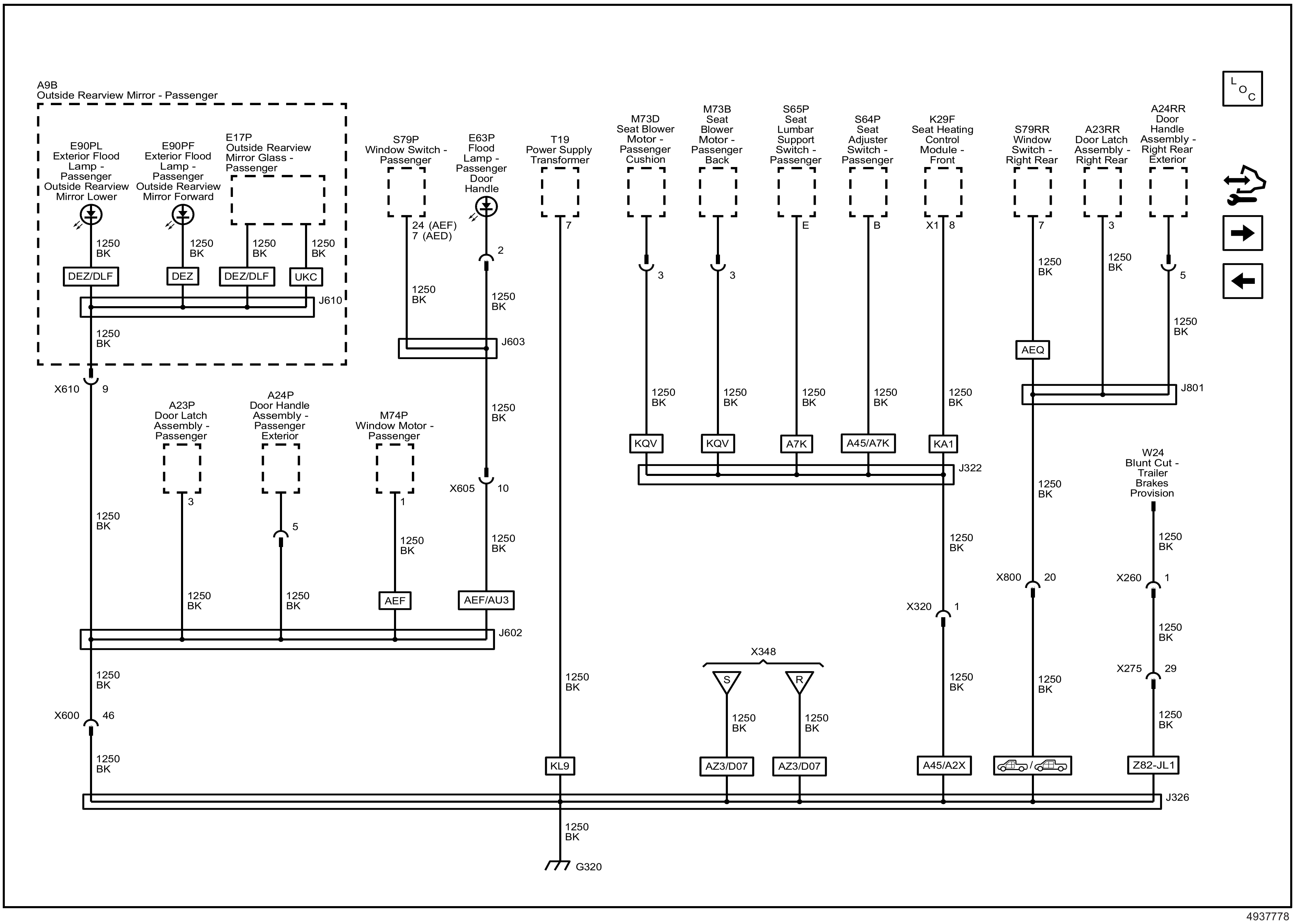
# Ground Distribution Schematics (G300 (2 of 2))


X51L
Fuse Block - Instrument Panel Left
KR192R
Pickup Box Auxiliary Endgate
Latch Relay - Right
KR192L
Pickup Box Auxiliary Endgate
Latch Relay - Left
KR191L
Pickup Box Endgate Latch Relay
- Left
KR191R
Pickup Box Endgate Latch Relay
- Right
5
15
23
21
17
8
1150
BK
QK2+QT5
KR8A
Sliding
Rear
Window
Close
Relay
KR8B
Sliding
Rear
Window
Open
Relay
61
62
58
59
S13P
Door Lock Switch -
Passenger
4
1250
BK
X605
22
X600
24
K29R
Seat Heating Control
Module - Rear
X1
8
X2
7
J370
X370
4
A48
AU3
KA6
QT5
J209
T
F
E
J325
K84
Keyless
Entry
Control
Module
K182
Parking
Assist
Control
Module
X1 14
X1 10
1151
BK/WH
J321
BTM-(UD5/UD7)
BTM+(UD5/UD7)
(UD5/UD7)-BTM
BTM/UD5/UD7
G300
L O C
4937775

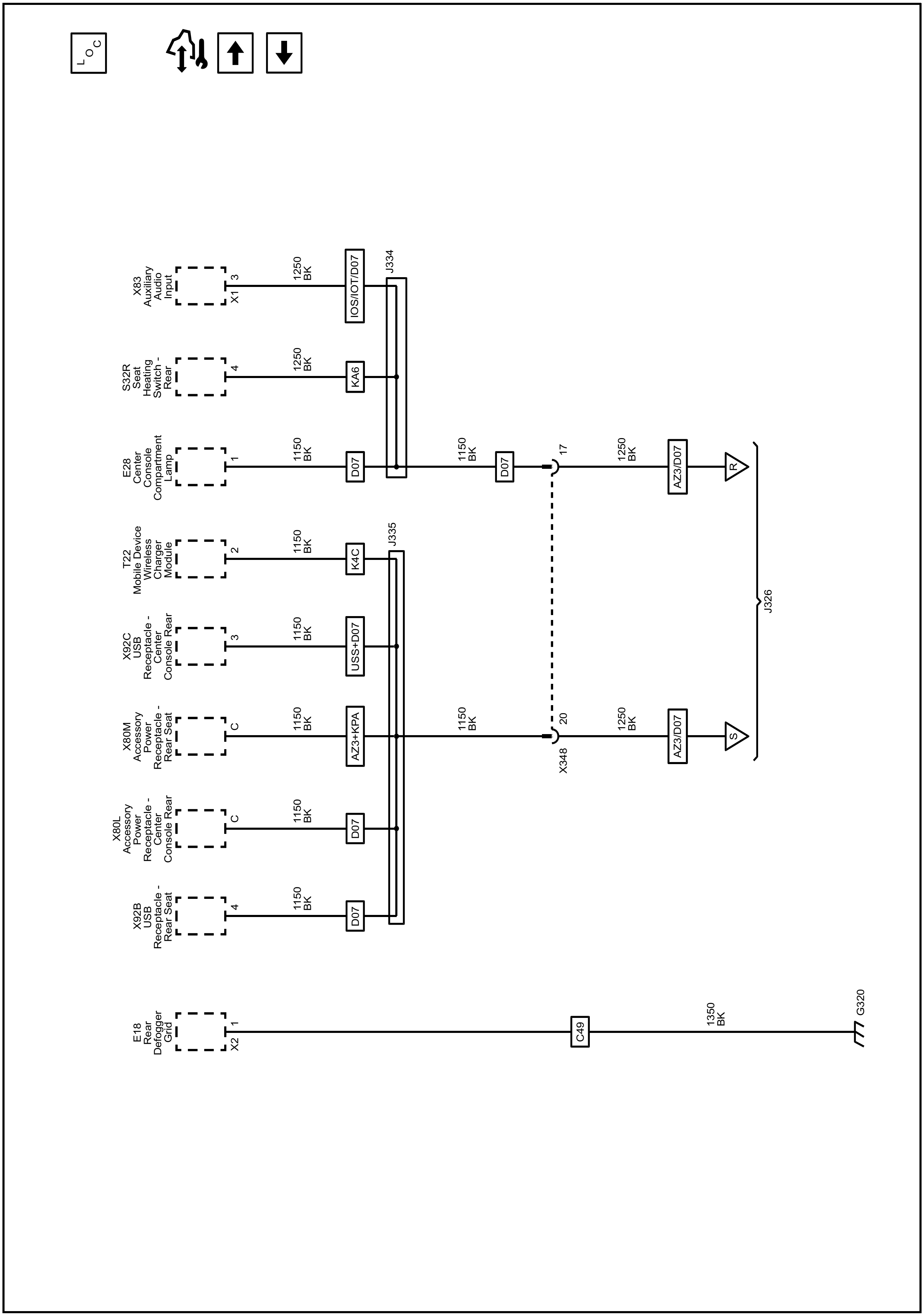
# Ground Distribution Schematics (G308, G312, G400, and G420)


4937757
K4 Assist Step Control Module
X1 2
2150 BK
BRS
G420
X80C Accessory Power Receptacle - Cargo
5
6650 BK
6
X450
6650 BK
KC9/KCA
G400
K157 Video Processing Control Module
X1 3
X1 12
2751 BK/WH
UVI/UV2
J282
T3 Audio Amplifier
X1 8
UQA
P17 Info Display Module
X1 8
IOS/IOT/(IOR+UIJ)
J233
A11 Radio
X1 6
X1 3
45
K73 Telematics Communication Interface Control Module
X1 4
X1 8
J231
31
X275
UE1
G312
K85 Passenger Presence Module
4
2551 BK/WH
26
X320
AL0
K36 Inflatable Restraint Sensing and Diagnostic Module
X1 19
G308

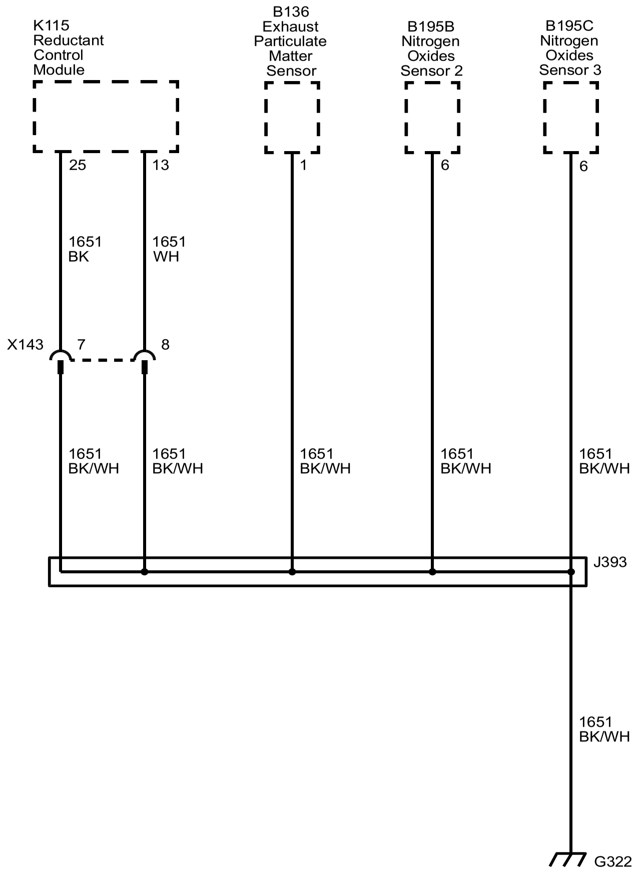
## Ground Distribution Schematics (G320 (1 of 2))


L O C
A9B
Outside Rearview Mirror - Passenger
E90PL
Exterior Flood Lamp - Passenger Outside Rearview Mirror Lower
E90PF
Exterior Flood Lamp - Passenger Outside Rearview Mirror Forward
E17P
Outside Rearview Mirror Glass - Passenger
1250 BK
DEZ/DLF
DEZ
DEZ/DLF
UKC
J610
X610
9
S79P
Window Switch - Passenger
24 (AEF)
7 (AED)
J603
E63P
Flood Lamp - Passenger Door Handle
2
X605
10
AEF/AU3
A23P
Door Latch Assembly - Passenger
3
A24P
Door Handle Assembly - Passenger Exterior
5
M74P
Window Motor - Passenger
1
AEF
J602
X600
46
T19
Power Supply Transformer
7
KL9
G320
M73D
Seat Blower Motor - Passenger Cushion
3
KQV
M73B
Seat Blower Motor - Passenger Back
3
KQV
S65P
Seat Lumbar Support Switch - Passenger
E
A7K
S64P
Seat Adjuster Switch - Passenger
B
A45/A7K
K29F
Seat Heating Control Module - Front
X1 8
KA1
J322
X320
1
A45/A2X
X348
S
R
AZ3/D07
AZ3/D07
S79RR
Window Switch - Right Rear
7
AEQ
A23RR
Door Latch Assembly - Right Rear
3
A24RR
Door Handle Assembly - Right Rear Exterior
5
J801
X800
20
W24
Blunt Cut - Trailer Brakes Provision
X260
1
X275
29
Z82-JL1
J326
4937778

# Ground Distribution Schematics (G320 (2 of 2))

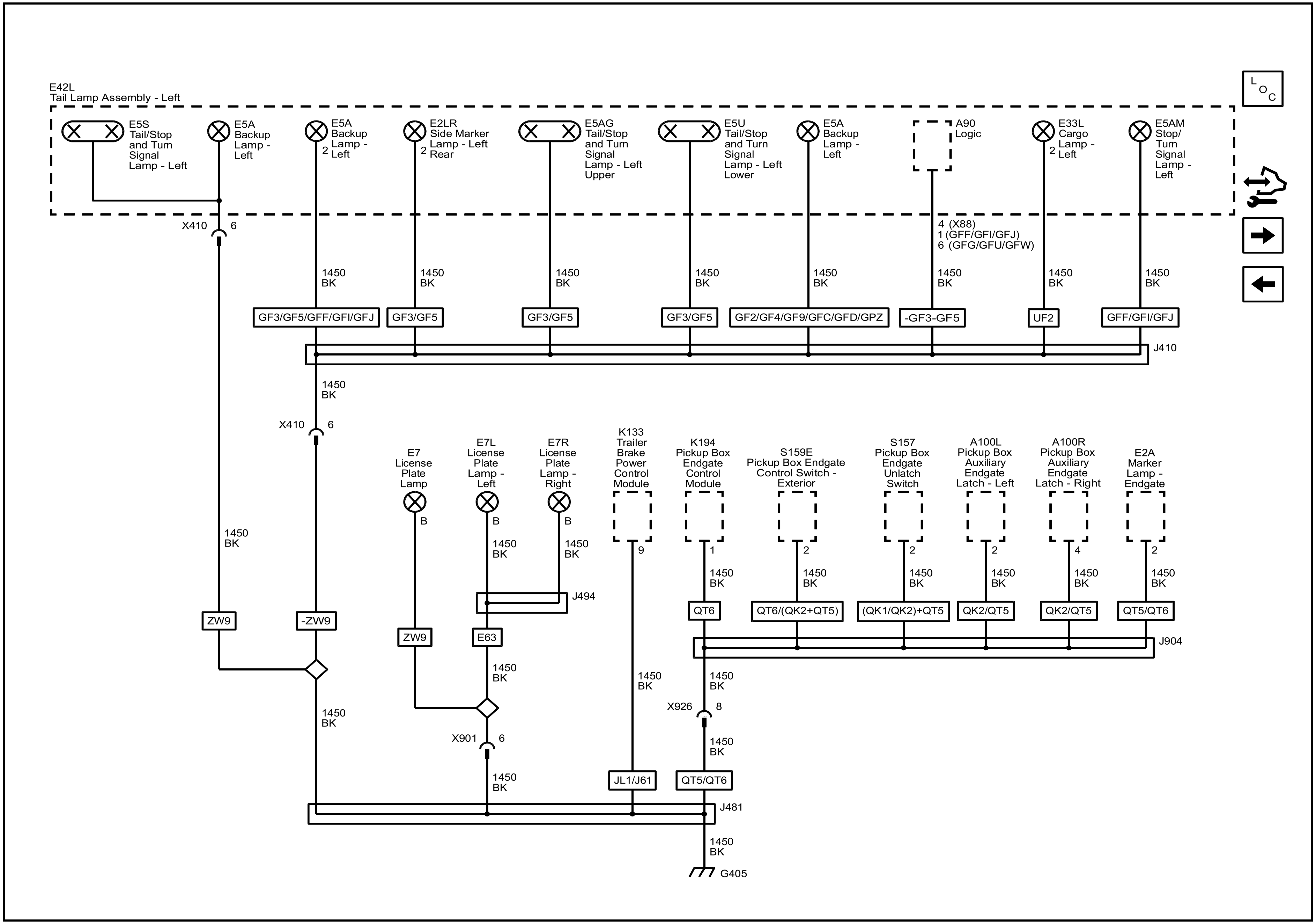

4937781
L O C
X83 Auxiliary Audio Input
X1 3
1250 BK
IOS/IOT/D07
J334
S32R Seat Heating Switch - Rear
4
1250 BK
KA6
E28 Center Console Compartment Lamp
1
1150 BK
D07
1150 BK
D07
17
1250 BK
AZ3/D07
R
T22 Mobile Device Wireless Charger Module
2
1150 BK
K4C
J335
X92C USB Receptacle - Center Console Rear
3
1150 BK
USS+D07
J326
X80M Accessory Power Receptacle - Rear Seat
C
1150 BK
AZ3+KPA
1150 BK
20
X348
1250 BK
AZ3/D07
S
X80L Accessory Power Receptacle - Center Console Rear
C
1150 BK
D07
X92B USB Receptacle - Rear Seat
4
1150 BK
D07
E18 Rear Defogger Grid
X2 1
C49
1350 BK
G320

## Ground Distribution Schematics (G322 (LM2))


K115
Reductant
Control
Module
B136
Exhaust
Particulate
Matter
Sensor
B195B
Nitrogen
Oxides
Sensor 2
B195C
Nitrogen
Oxides
Sensor 3
25
13
1
6
6
1651
BK
1651
WH
X143
7
8
1651
BK/WH
1651
BK/WH
1651
BK/WH
1651
BK/WH
1651
BK/WH
J393
1651
BK/WH
G322

4937783

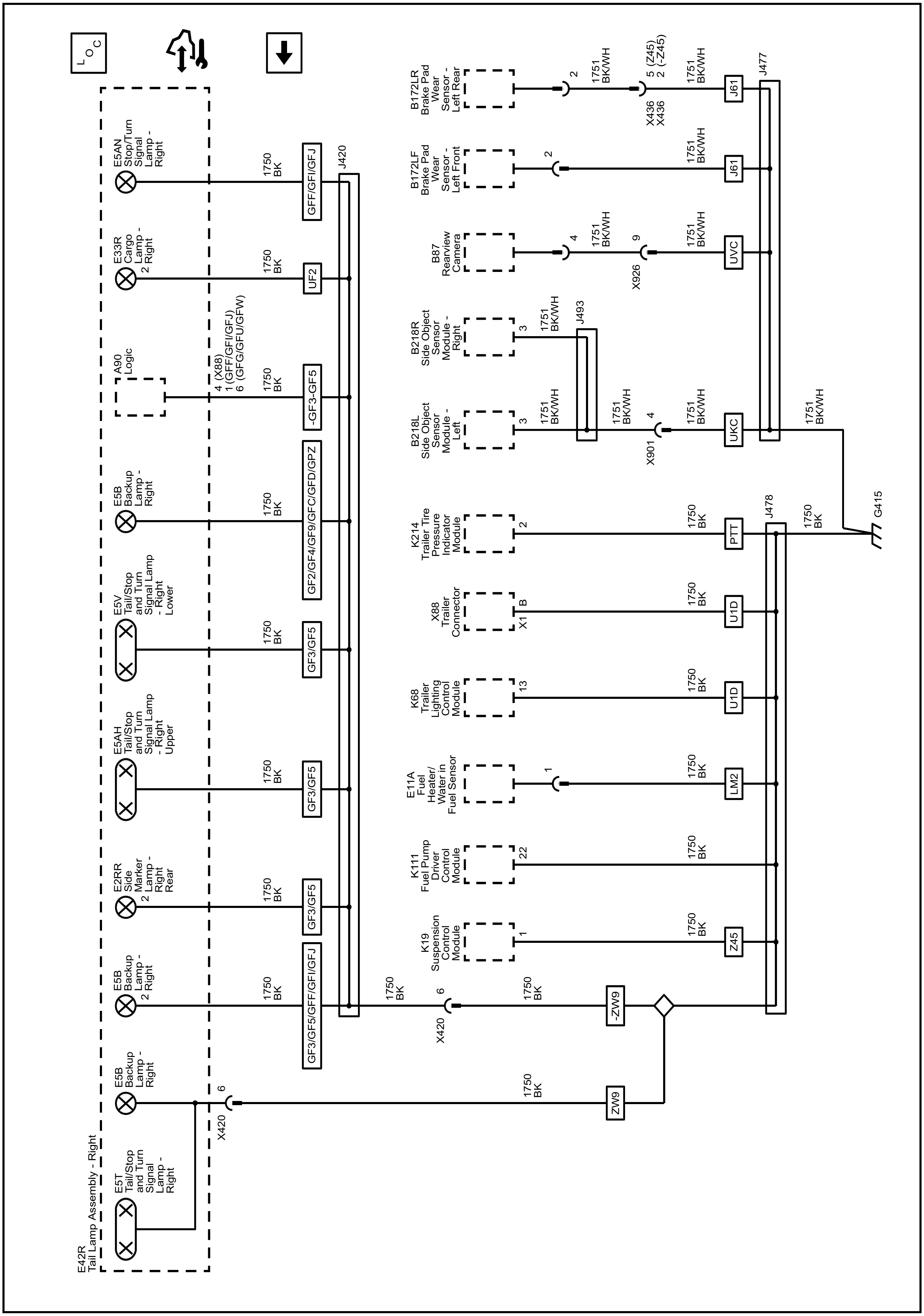
## Ground Distribution Schematics (G405)



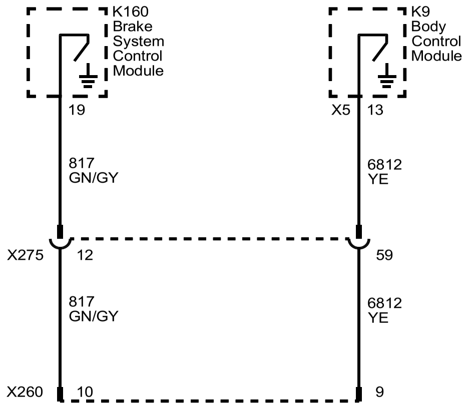
L O C
E42L
Tail Lamp Assembly - Left
E5S Tail/Stop and Turn Signal Lamp - Left
E5A Backup Lamp - Left
E5A Backup Lamp - Left
2
E2LR Side Marker Lamp - Left Rear
2
E5AG Tail/Stop and Turn Signal Lamp - Left Upper
E5U Tail/Stop and Turn Signal Lamp - Left Lower
E5A Backup Lamp - Left
A90 Logic
E33L Cargo Lamp - Left
2
E5AM Stop/ Turn Signal Lamp - Left
X410
6
4 (X88)
1 (GFF/GFI/GFJ)
6 (GFG/GFU/GFW)
1450 BK
GF3/GF5/GFF/GFI/GFJ
GF3/GF5
GF3/GF5
GF3/GF5
GF2/GF4/GF9/GFC/GFD/GPZ
-GF3-GF5
UF2
GFF/GFI/GFJ
J410
X410
6
E7 License Plate Lamp
E7L License Plate Lamp - Left
E7R License Plate Lamp - Right
K133 Trailer Brake Power Control Module
K194 Pickup Box Endgate Control Module
S159E Pickup Box Endgate Control Switch - Exterior
S157 Pickup Box Endgate Unlatch Switch
A100L Pickup Box Auxiliary Endgate Latch - Left
A100R Pickup Box Auxiliary Endgate Latch - Right
E2A Marker Lamp - Endgate
B
9
1
2
4
J494
ZW9
-ZW9
ZW9
E63
QT6
QT6/(QK2+QT5)
(QK1/QK2)+QT5
QK2/QT5
QK2/QT5
QT5/QT6
J904
X926
8
X901
6
JL1/J61
QT5/QT6
J481
G405

4937785

## Ground Distribution Schematics (G415)

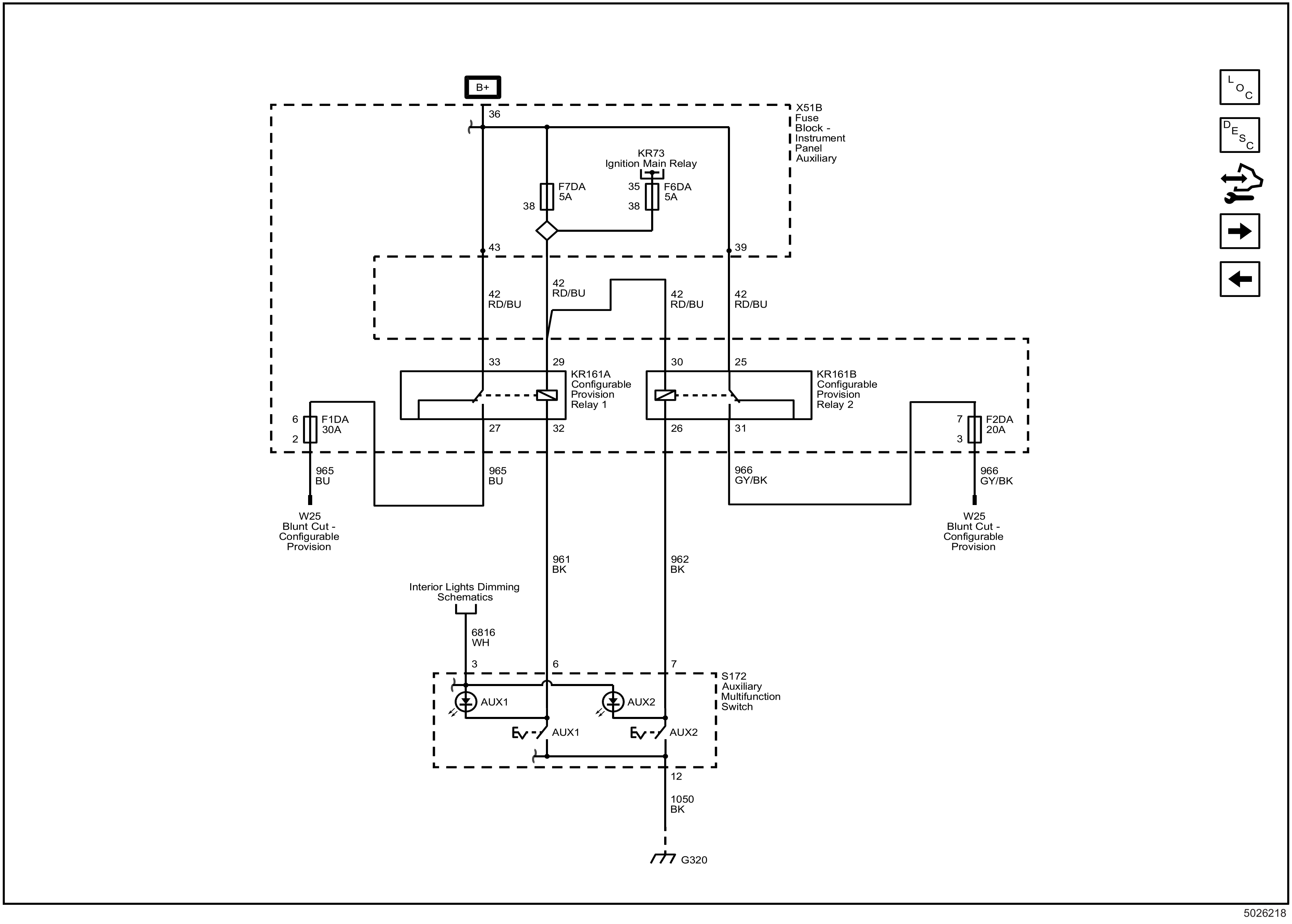

4937788
LOC
E42R Tail Lamp Assembly - Right
E5T Tail/Stop and Turn Signal Lamp - Right
E5B Backup Lamp - Right
E5B Backup Lamp - 2 Right
E2RR Side Marker Lamp - 2 Right Rear
E5AH Tail/Stop and Turn Signal Lamp - Right Upper
E5V Tail/Stop and Turn Signal Lamp - Right Lower
E5B Backup Lamp - Right
A90 Logic
E33R Cargo Lamp - 2 Right
E5AN Stop/Turn Signal Lamp - Right
4 (X88)
1 (GFF/GFI/GFJ)
6 (GFG/GFU/GFW)
1750 BK
GF3/GF5/GFF/GFI/GFJ
GF3/GF5
GF2/GF4/GF9/GFC/GFD/GPZ
-GF3-GF5
UF2
GFF/GFI/GFJ
J420
X420
6
-ZW9
ZW9
K19 Suspension Control Module
1
K111 Fuel Pump Driver Control Module
22
E11A Fuel Heater/ Water in Fuel Sensor
1
K68 Trailer Lighting Control Module
13
X88 Trailer Connector
X1 B
K214 Trailer Tire Pressure Indicator Module
2
Z45
LM2
U1D
PTT
J478
G415
B218L Side Object Sensor Module - Left
3
B218R Side Object Sensor Module - Right
3
J493
1751 BK/WH
X901
4
UKC
B87 Rearview Camera
4
9
X926
UVC
B172LF Brake Pad Wear Sensor - Left Front
2
J61
B172LR Brake Pad Wear Sensor - Left Rear
2
X436
X436
5 (Z45)
2 (-Z45)
J477

## Upfitter Provision Schematics (Upfitter Provisions - Signals)

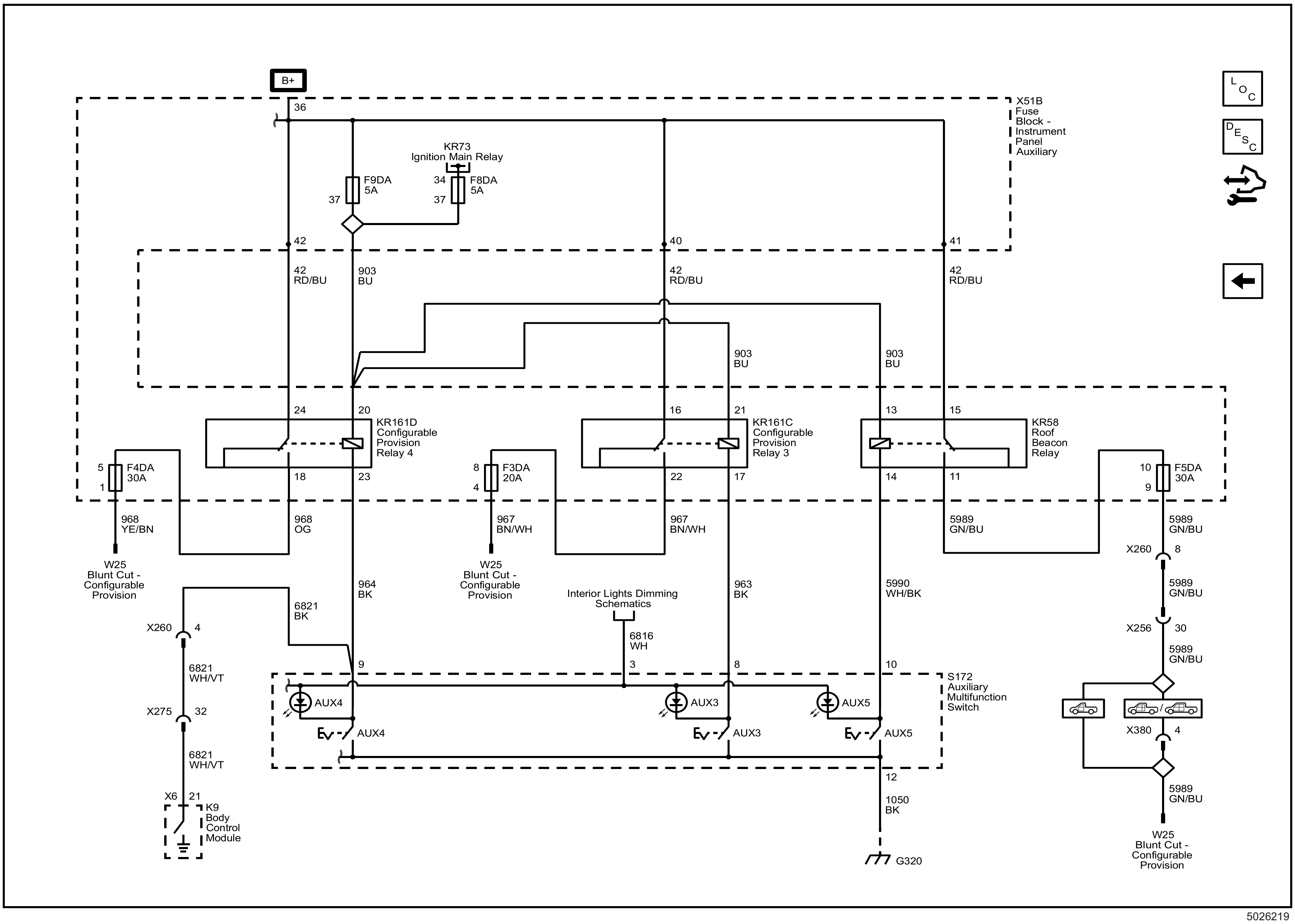

K160
Brake
System
Control
Module
19
817
GN/GY
X275
12
817
GN/GY
X260
10
K9
Body
Control
Module
X5
13
6812
YE
59
6812
YE
9

5067752

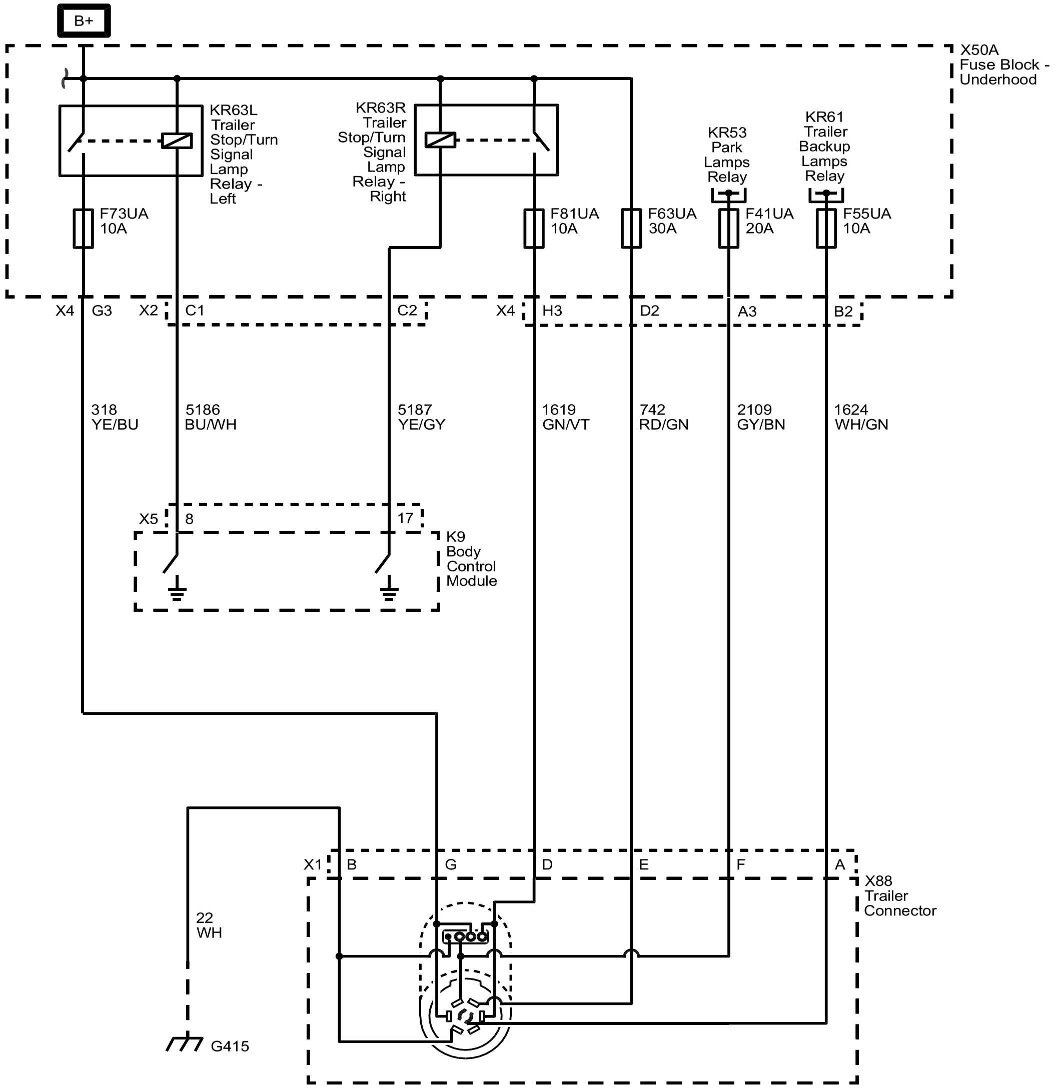
## Upfitter Provision Schematics (Upfitter Provisions - 1 of 2 (9L7))


L O C
D E S C
B+
36
X51B Fuse Block - Instrument Panel Auxiliary
KR73 Ignition Main Relay
F7DA 5A
38
35
F6DA 5A
38
43
39
42 RD/BU
42 RD/BU
42 RD/BU
42 RD/BU
33
29
KR161A Configurable Provision Relay 1
30
25
KR161B Configurable Provision Relay 2
6
F1DA 30A
2
27
32
26
31
7
F2DA 20A
3
965 BU
965 BU
966 GY/BK
966 GY/BK
W25 Blunt Cut - Configurable Provision
W25 Blunt Cut - Configurable Provision
961 BK
962 BK
Interior Lights Dimming Schematics
6816 WH
3
6
7
S172 Auxiliary Multifunction Switch
AUX1
AUX2
AUX1
AUX2
12
1050 BK
G320
5026218

# Upfitter Provision Schematics (Upfitter Provisions - 2 of 2 (9L7))

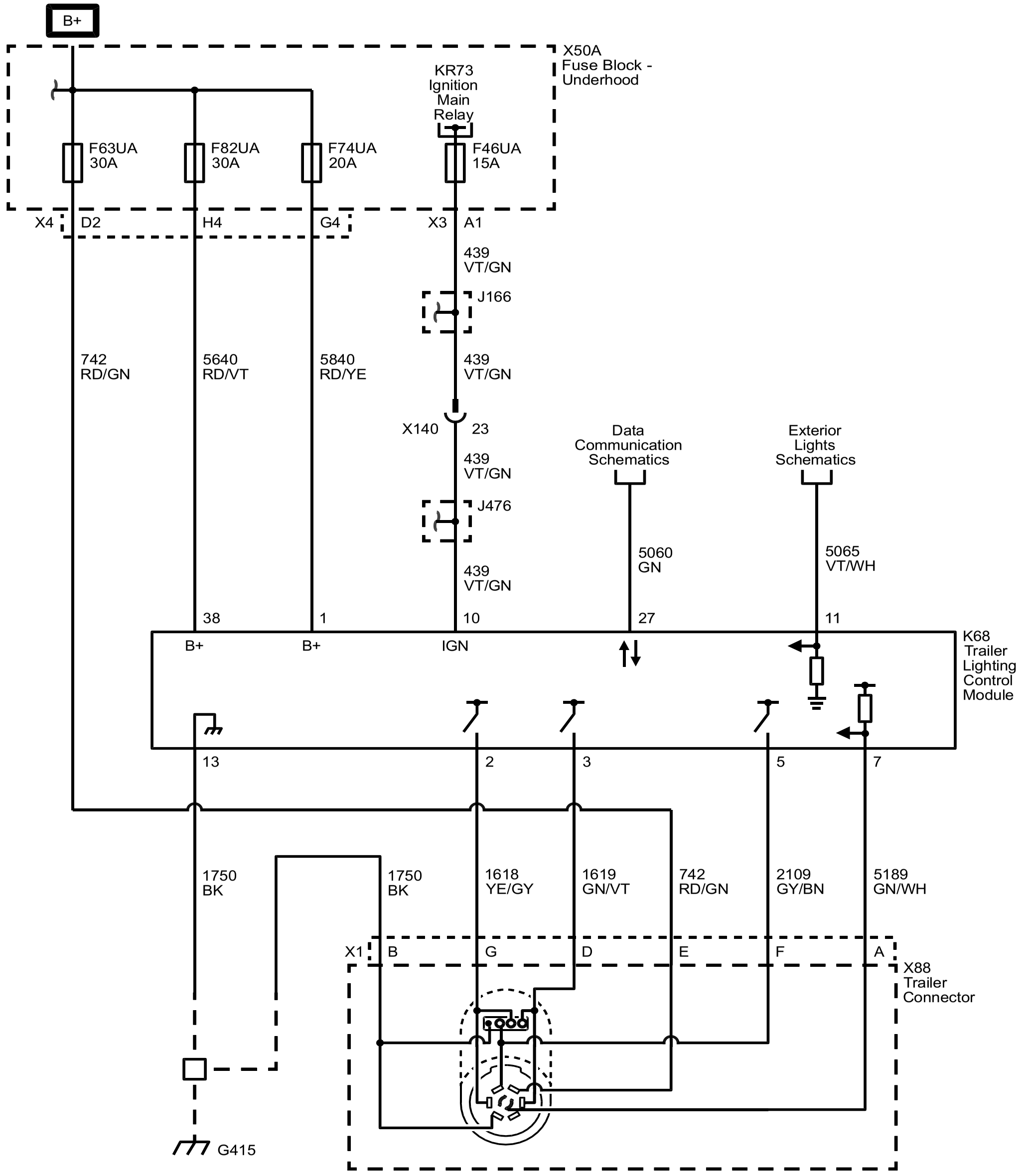

B+
36
X51B Fuse Block - Instrument Panel Auxiliary
KR73 Ignition Main Relay
F9DA 5A
37
34
F8DA 5A
37
42
40
41
42 RD/BU
903 BU
42 RD/BU
42 RD/BU
903 BU
903 BU
24
20
KR161D Configurable Provision Relay 4
16
21
KR161C Configurable Provision Relay 3
13
15
KR58 Roof Beacon Relay
5
1
F4DA 30A
18
23
8
4
F3DA 20A
22
17
14
11
10
9
F5DA 30A
968 YE/BN
968 OG
967 BN/WH
967 BN/WH
5989 GN/BU
5989 GN/BU
W25 Blunt Cut - Configurable Provision
W25 Blunt Cut - Configurable Provision
X260
8
964 BK
963 BK
5990 WH/BK
5989 GN/BU
6821 BK
Interior Lights Dimming Schematics
X260
4
6816 WH
X256
30
6821 WH/VT
9
3
8
10
5989 GN/BU
S172 Auxiliary Multifunction Switch
AUX4
AUX3
AUX5
X275
32
AUX4
AUX3
AUX5
X380
4
6821 WH/VT
12
X6
21
K9 Body Control Module
1050 BK
5989 GN/BU
G320
W25 Blunt Cut - Configurable Provision
L O C
D E S C
5026219

## Trailer Connector/Provision Schematics (Trailer Connector Pins: A, B, D, E, F, G (Z82-U1D))


B+
X50A
Fuse Block -
Underhood
KR63L
Trailer
Stop/Turn
Signal
Lamp
Relay -
Left
KR63R
Trailer
Stop/Turn
Signal
Lamp
Relay -
Right
KR53
Park
Lamps
Relay
KR61
Trailer
Backup
Lamps
Relay
F73UA
10A
F81UA
10A
F63UA
30A
F41UA
20A
F55UA
10A
X4
G3
X2
C1
C2
X4
H3
D2
A3
B2
318
YE/BU
5186
BU/WH
5187
YE/GY
1619
GN/VT
742
RD/GN
2109
GY/BN
1624
WH/GN
X5
8
17
K9
Body
Control
Module
X1
B
G
D
E
F
A
X88
Trailer
Connector
22
WH
G415

5026220

## Trailer Connector/Provision Schematics (Trailer Connector Pins: A, B, D, E, F, G (U1D))


B+
X50A
Fuse Block -
Underhood
KR73
Ignition
Main
Relay
F63UA
30A
F82UA
30A
F74UA
20A
F46UA
15A
X4
D2
H4
G4
X3
A1
439
VT/GN
J166
439
VT/GN
X140
23
439
VT/GN
J476
439
VT/GN
742
RD/GN
5640
RD/VT
5840
RD/YE
Data
Communication
Schematics
Exterior
Lights
Schematics
5060
GN
5065
VT/WH
38
1
10
27
11
B+
B+
IGN
K68
Trailer
Lighting
Control
Module
13
2
3
5
7
1750
BK
1750
BK
1618
YE/GY
1619
GN/VT
742
RD/GN
2109
GY/BN
5189
GN/WH
X1
B
G
D
E
F
A
X88
Trailer
Connector
G415

5026221

# Component Locator

## Master Electrical Component List

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| A3L | Sunshade - Left | — | In the passenger compartment, at the front of the headliner | *Headliner Components* | — |
| A3R | Sunshade - Right | — | In the passenger compartment, at the front of the headliner | *Headliner Components* | — |
| A7 | Fuel Pump and Level Sensor Assembly | — | Under the vehicle, mounted in the fuel tank | — | — |
| A9A | Outside Rearview Mirror - Driver | — | Outside the vehicle, at the front of the driver door | • *Front of Vehicle Components (Chevrolet)*<br>• *Front of Vehicle Components (GMC)* | — |
| A9B | Outside Rearview Mirror - Passenger | — | Outside the vehicle, at the front of the passenger door | • *Front of Vehicle Components (Chevrolet)*<br>• *Front of Vehicle Components (GMC)* | — |
| A10 | Inside Rearview Mirror | — | In the passenger compartment, at the top center of the windshield | *Headliner Components* | • *A10 Inside Rearview Mirror X1 (DD8/DRZ)*<br>• *A10 Inside Rearview Mirror X2 (DRZ)* |
| A11 | Radio | — | In the passenger compartment, right front, between the instrument panel and bulkhead | *Instrument Panel - Rear* | • *A11 Radio X1 (IOR)*<br>• *A11 Radio X1 (IOS/IOT)*<br>• *A11 Radio X2 (IOR)*<br>• *A11 Radio X2 (IOS/IOT)*<br>• *A11 Radio X3 (IOR)*<br>• *A11 Radio X3 (IOS/IOT)*<br>• *A11 Radio X4 ((IOS/IOT)+D07)*<br>• *A11 Radio X4 (IOR+(UIR/UIJ))*<br>• *A11 Radio X5 (UVB/UVI/UV2)*<br>• *A11 Radio X6 (IOR)*<br>• *A11 Radio X6 (IOS/IOT)*<br>• *A11 Radio X7 (IOS/IOT)*<br>• *A11 Radio X8 ((IOS/IOT)-UE1)*<br>• *A11 Radio X8 (IOR+U2K)*<br>• *A11 Radio X9 ((IOS/IOT)+U2K)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| A14D | Seat Lumbar Support Pump - Driver | A2X | In the passenger compartment, left front, within driver seat | — | *A14D Seat Lumbar Support Pump - Driver (A2X-A45)* |
| A14P | Seat Lumbar Support Pump - Passenger | A7K | In the passenger compartment, right front, within passenger seat | — | *A14P Seat Lumbar Support Pump - Passenger (A7K)* |
| A16 | Transfer Case Motor | NP0/NQH | Under the vehicle, mounted to the rear of the transfer case | — | *A16 Transfer Case Motor (NP0/NQH)* |
| A22 | Radio Controls | UIR | In the passenger compartment, at the center of the Instrument Panel, part of the Info Display Module | *Instrument Panel - Front* | *A22 Radio Controls (IOR)* |
| A23D | Door Latch Assembly - Driver | — | In the driver door, at the rear center | *Driver Door Components* | *A23D Door Latch Assembly - Driver* |
| A23LR | Door Latch Assembly - Left Rear | Extended Cab/ Crew Cab | In the left rear door, at the rear center | *Right Rear Door Components (Extended Cab/Crew Cab)* | *A23LR Door Latch Assembly - Left Rear (AU3)* |
| A23P | Door Latch Assembly - Passenger | — | In the passenger door, at the rear center | *Passenger Door Components* | *A23P Door Latch Assembly - Passenger (AU3)* |
| A23RR | Door Latch Assembly - Right Rear | Extended Cab/ Crew Cab | In the right rear door, at the rear center | *Left Rear Door Components (Extended Cab/Crew Cab)* | *A23RR Door Latch Assembly - Right Rear* |
| A24D | Door Handle Assembly - Driver Exterior | — | Outside of the vehicle, at the rear of the driver door | — | *A24D Door Handle Assembly - Driver Exterior* |
| A24LR | Door Handle Assembly - Left Rear Exterior | Extended Cab/ Crew Cab | Outside of the vehicle, at the rear of the left rear door | *Right Rear Door Components (Extended Cab/Crew Cab)* | *A24LR Door Handle Assembly - Left Rear Exterior (BTM)* |
| A24P | Door Handle Assembly - Passenger Exterior | — | Outside of the vehicle, at the rear of the passenger door | — | *A24P Door Handle Assembly - Passenger Exterior* |
| A24RR | Door Handle Assembly - Right Rear Exterior | Extended Cab/ Crew Cab | Outside of the vehicle, at the rear of the right rear door | *Left Rear Door Components (Extended Cab/Crew Cab)* | *A24RR Door Handle Assembly - Right Rear Exterior (BTM)* |
| A26 | HVAC Controls | IOR | In the passenger compartment, at the center of the instrument panel, beneath P17 Info Display Module | *Instrument Panel - Front* | *A26 HVAC Controls* |
| A38 | Reductant Pump and Sensor Assembly | LM2 | Under the vehicle, mounted to the outboard side of the frame, below the passenger side of the cab | — | *A38 Reductant Pump and Sensor Assembly (LM2)* |
| A98 | Front Overhead Console Assembly | — | In the passenger compartment, front center, mounted to headliner | *Headliner Components* | • *A98 Front Overhead Console Assembly X1*<br>• *A98 Front Overhead Console Assembly X2* |
| A99L | Pickup Box Endgate Latch - Left | QK2/QT6 | At the rear of the vehicle, within endgate, on the left side | • *Endgate Components (QK2)*<br>• *Endgate Components (QT6)* | • *A99L Pickup Box Endgate Latch - Left (QK2)*<br>• *A99L Pickup Box Endgate Latch - Left (QT6)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| A99R | Pickup Box Endgate Latch - Right | QK2/QT6 | At the rear of the vehicle, within endgate, on the right side | • *Endgate Components (QK2)*<br>• *Endgate Components (QT6)* | • *A99R Pickup Box Endgate Latch - Right (QK2)*<br>• *A99R Pickup Box Endgate Latch - Right (QT6)* |
| A100L | Pickup Box Auxiliary Endgate Latch - Left | QK2 | At the rear of the vehicle, within endgate, on the left side | *Endgate Components (QK2)* | *A100L Pickup Box Auxiliary Endgate Latch - Left (QK2)* |
| A100R | Pickup Box Auxiliary Endgate Latch - Right | QK2 | At the rear of the vehicle, within endgate, on the right side | *Endgate Components (QK2)* | *A100R Pickup Box Auxiliary Endgate Latch - Right (QK2)* |
| B1 | A/C Refrigerant Pressure Sensor | — | • (L3B) In the engine compartment, left front, mounted to A/C high pressure line, near G1 A/C Compressor<br>• (LV3) In the engine compartment, right front, attached to AC line, near right side of condenser | • *Engine Components - Left Rear (L3B)*<br>• *Radiator Support Components (LV3)* | *B1 A/C Refrigerant Pressure Sensor* |
| B5LF | Wheel Speed Sensor - Left Front | — | Outside the vehicle, part of the left front wheel hub assembly | — | *B5LF Wheel Speed Sensor - Left Front* |
| B5LR | Wheel Speed Sensor - Left Rear | — | Outside the vehicle, mounted to the outboard end of the left axle tube | *Brake and Suspension Components* | *B5LR Wheel Speed Sensor - Left Rear* |
| B5RF | Wheel Speed Sensor - Right Front | — | Outside the vehicle, part of the right front wheel hub assembly | — | *B5RF Wheel Speed Sensor - Right Front* |
| B5RR | Wheel Speed Sensor - Right Rear | — | Outside the vehicle, mounted to the outboard end of the right axle tube | *Brake and Suspension Components* | *B5RR Wheel Speed Sensor - Right Rear* |
| B9 | Ambient Air Temperature Sensor | — | Outside the vehicle, behind the right side of the grill | *Passenger Door Components* | *B9 Ambient Air Temperature Sensor* |
| B10B | Ambient Light/ Sunload Sensor | — | In the passenger compartment, at the top middle of the instrument panel | *Instrument Panel - Front* | *B10B Ambient Light/ Sunload Sensor* |
| B12A | Transmission Fluid Pressure Switch | — | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | — |
| B13 | Transmission Fluid Temperature Sensor | — | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | *B13 Transmission Fluid Temperature Sensor (MQB)* |
| B14A | Transmission Output Shaft Speed Sensor | — | Under the vehicle, mounted in the transmission tailshaft housing | — | *B14A Transmission Output Shaft Speed Sensor (MQB)* |
| B14C | Transmission Input Shaft Speed Sensor | — | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | *B14C Transmission Input Shaft Speed Sensor (MQB)* |
| B14D | Transmission Intermediate Shaft Speed Sensor | — | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | — |
| B14DA | Transmission Intermediate Speed Sensor 1 | — | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | *B14DA Transmission Intermediate Speed Sensor 1 (MQB)* |
| B14DB | Transmission Intermediate Speed Sensor 2 | — | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | *B14DB Transmission Intermediate Speed Sensor 2 (MQB)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| B15 | Transmission Internal Mode Switch | — | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | *B15 Transmission Internal Mode Switch (MQE)* |
| B18 | Battery Current Sensor | -KL9 | In the engine compartment, right rear, near negative battery cable at bulkhead | *Engine Compartment Components* | *B18 Battery Current Sensor (-KL9)* |
| B20 | Brake Fluid Level Switch | — | In the engine compartment, mounted in the brake fluid reservoir | — | *B20 Brake Fluid Level Switch* |
| B22 | Brake Pedal Position Sensor | — | In the passenger compartment, in the driver side footwell, under the instrument panel | *Behind Instrument Panel - Left* | *B22 Brake Pedal Position Sensor* |
| B23 | Camshaft Position Sensor | L82/L84/L87/ LM2/LV3 | • (L82/L84/L87) In the engine compartment, front center, mounted to timing chain cover, above crankshaft harmonic balancer<br>• (LM2) In the engine compartment, rear center, mounted to the right rear side of the engine block, above transmission bellhousing | • *Engine Components - Left Front (L82/L84/L87)*<br>• *Engine Components - Right Rear (LM2)* | • *B23 Camshaft Position Sensor (L82/L84/L87)*<br>• *B23 Camshaft Position Sensor (LM2)* |
| B23E | Camshaft Position Sensor - Exhaust | L3B | In the engine compartment, at the rear of the engine, mounted to the right rear of the camshaft carrier | *Engine Components - Right Rear (L3B)* | *B23E Camshaft Position Sensor - Exhaust (L3B)* |
| B23F | Camshaft Position Sensor - Intake | L3B | In the engine compartment, at the rear of the engine, mounted to the left rear of the camshaft carrier | *Engine Components - Right Rear (L3B)* | *B23F Camshaft Position Sensor - Intake (L3B)* |
| B24LF | Mobile Telephone Microphone - Left Front | — | In the passenger compartment, left front, attached to the headliner | *Headliner Components* | *B24LF Mobile Telephone Microphone - Left Front* |
| B24RF | Mobile Telephone Microphone - Right Front | IOS/IOT | In the passenger compartment, right front, attached to the headliner | *Headliner Components* | *B24RF Mobile Telephone Microphone - Right Front (IOS/IOT)* |
| B26 | Crankshaft Position Sensor | — | • (L3B) In the engine compartment, left rear, mounted to rear of engine block. Below M64 Starter Motor<br>• (L82/L84/L87) In the engine compartment, right rear, mounted to right rear side of engine block, behind M64 Starter Motor | • *Engine Components - Left Front (L3B)*<br>• *Engine Components - Right (LV3)*<br>• *Engine Components - Right Front (L82/L84/L87)* | • *B26 Crankshaft Position Sensor (L3B)*<br>• *B26 Crankshaft Position Sensor (L82/L84/L87/ LV3)*<br>• *B26 Crankshaft Position Sensor (LM2)* |
| B27D | Door Handle Switch - Driver Exterior | — | Outside of the vehicle, at the rear of the driver door, within A24D Door Handle Assembly - Driver Exterior | — | — |
| B27LR | Door Handle Switch - Left Rear Exterior | Extended Cab/ Crew Cab | Outside of the vehicle, at the rear of the left rear door, within A24LR Door Handle Assembly - Left Rear Exterior | *Right Rear Door Components (Extended Cab/Crew Cab)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| B27P | Door Handle Switch - Passenger Exterior | — | Outside of the vehicle, at the rear of the passenger door, within A24P Door Handle Assembly - Passenger Exterior | — | — |
| B27RR | Door Handle Switch - Right Rear Exterior | Extended Cab/ Crew Cab | Outside of the vehicle, at the rear of the right rear door, within A24RR Door Handle Assembly - Right Rear Exterior | *Left Rear Door Components (Extended Cab/Crew Cab)* | — |
| B34 | Engine Coolant Temperature Sensor | — | (LV3) In the engine compartment, front center, mounted to water pump | *Engine Components - Right (LV3)* | • *B34 Engine Coolant Temperature Sensor (L82/L84/ L87)*<br>• *B34 Engine Coolant Temperature Sensor (LV3)* |
| B34A | Engine Coolant Temperature Sensor 1 | L3B/LM2 | • (L3B) In the engine compartment, left side of engine block, beneath intake manifold, behind G13 Generator | *Engine Components - Left Front (L3B)* | • *B34A Engine Coolant Temperature Sensor 1 (L3B)*<br>• *B34A Engine Coolant Temperature Sensor 1 (LM2)* |
| B34B | Engine Coolant Temperature Sensor 2 | L3B/LM2 | (L3B) In the engine compartment, right rear, mounted to coolant line, behind the exhaust turbofold | • *Engine Components - Right Front (L3B)*<br>• *Engine Components - Right Rear (L3B)* | • *B34B Engine Coolant Temperature Sensor 2 (L3B)*<br>• *B34B Engine Coolant Temperature Sensor 2 (LM2)* |
| B34C | Engine Coolant Temperature Sensor 3 | L3B/LM2 | • (L3B) In the engine compartment, right side, mounted above exhaust manifold, to the right off the camshaft carrier | — | *B34C Engine Coolant Temperature Sensor 3 (L3B)* |
| B34D | Engine Coolant Temperature Sensor 4 | L3B/LM2 | • (LM2) In the engine compartment, left rear, at the left rear of the engine, behind Q74 Engine Coolant Bypass Valve<br>• (L3B) In the engine compartment, right rear, near bulkhead | *Engine Components - Left Rear (LM2)* | *B34D Engine Coolant Temperature Sensor 4 (LM2)* |
| B34E | Engine Coolant Temperature Sensor 5 | L3B/LM2 | • (L3B) In the engine compartment, right side, mounted above exhaust manifold, to the right off the camshaft carrier<br>• (LM2) In the engine compartment, left rear, mounted to engine block, below intake manifold | • *Engine Components - Left Rear (LM2)*<br>• *Engine Components - Right Front (L3B)* | • *B34E Engine Coolant Temperature Sensor 5 (L3B)*<br>• *B34E Engine Coolant Temperature Sensor 5 (LM2)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| B34F | Engine Coolant Temperature Sensor 6 | L3B/LM2 | (L3B) In the engine compartment, left side of engine, in front of thermostat housing | *Engine Components - Left Rear (L3B)* | • *B34F Engine Coolant Temperature Sensor 6 (L3B)*<br>• *B34F Engine Coolant Temperature Sensor 6 (LM2)* |
| B35 | Engine Oil Level Switch | L82/L84/L87/LV3 | In the engine compartment, mounted to the right side of the engine oil pan | • *Engine Components - Right (LV3)*<br>• *Engine Components - Right Front (L82/L84/L87)* | *B35 Engine Oil Level Switch (L82/L84/L87/LV3)* |
| B36 | Engine Oil Temperature Sensor | L3B | In the engine compartment, left side, mounted to the engine oil filter housing | *Engine Components - Right Front (L3B)* | *B36 Engine Oil Temperature Sensor (L3B/LM2)* |
| B37B | Engine Oil Pressure Sensor | — | • (L3B) In the engine compartment, front center, mounted to the right side of the engine block, near the accessory belt drive<br>• (L82/L84/L87) In the engine compartment, left side of engine, mounted above the engine oil filter<br>• (LV3) In the engine compartment, front center, beneath Q38 Throttle Body | • *Engine Components - Left (LV3)*<br>• *Engine Components - Left Front (L82/L84/L87)*<br>• *Engine Components - Right Front (L3B)* | • *B37B Engine Oil Pressure Sensor (L82/L84/L87)*<br>• *B37B Engine Oil Pressure Sensor (LM2)*<br>• *B37B Engine Oil Pressure Sensor (LV3/L3B)* |
| B39 | A/C Evaporator Temperature Sensor | — | In the passenger compartment, behind the instrument panel, mounted in the HVAC housing | — | *B39 A/C Evaporator Temperature Sensor* |
| B46 | Fuel Level Sensor | — | Under the vehicle, inside the fuel tank, part of the fuel pump and level sensor assembly | — | — |
| B47 | Fuel Pressure Sensor | — | On the vehicle underbody, on the fuel line, near the transmission crossmember mount | — | • *B47 Fuel Pressure Sensor (LM2)*<br>• *B47 Fuel Pressure Sensor (-LM2)* |
| B47B | Fuel Rail Pressure Sensor | LM2 | In the engine compartment, at the top of the engine, mounted to the fuel rail | — | *B47B Fuel Rail Pressure Sensor (LM2)* |
| B52A | Heated Oxygen Sensor 1 | L3B | In the engine compartment, right rear, mounted in exhaust, behind turbocharger | — | *B52A Heated Oxygen Sensor 1 (L3B)* |
| B52B | Heated Oxygen Sensor 2 | L3B | In the engine compartment, right rear, mounted in catalytic converter | • *Engine Components - Right Rear (L3B)*<br>• *Engine Components - Right Rear (L3B)* | *B52B Heated Oxygen Sensor 2 (L3B)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| B52C | Heated Oxygen Sensor - Bank 1 Sensor 1 | L82/L84/L87/ LV3 | Under the vehicle, mounted in the bank 1 exhaust, upstream of the catalytic converter | • *Engine Components - Oxygen Sensors (LV3)*<br>• *Engine Components - Top (L82/ L84/L87)* | • *B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/L87)*<br>• *B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LV3)* |
| B52D | Heated Oxygen Sensor - Bank 1 Sensor 2 | L82/L84/L87/ LV3 | Under the vehicle, mounted in the bank 1 exhaust, downstream of the catalytic converter | • *Engine Components - Oxygen Sensors (LV3)*<br>• *Engine Components - Top (L82/ L84/L87)* | • *B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/L87)*<br>• *B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LV3)* |
| B52E | Heated Oxygen Sensor - Bank 2 Sensor 1 | L82/L84/L87/ LV3 | Under the vehicle, mounted in the bank 2 exhaust, upstream of the catalytic converter | • *Engine Components - Oxygen Sensors (LV3)*<br>• *Engine Components - Top (L82/ L84/L87)* | • *B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/L87)*<br>• *B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LV3)* |
| B52F | Heated Oxygen Sensor - Bank 2 Sensor 2 | L82/L84/L87/ LV3 | Under the vehicle, mounted in the bank 2 exhaust, downstream of the catalytic converter | • *Engine Components - Oxygen Sensors (LV3)*<br>• *Engine Components - Top (L82/ L84/L87)* | • *B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87)*<br>• *B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LV3)* |
| B55 | Engine Hood Switch | — | Outside the vehicle, at the front center of the hood, part of the hood latch assembly | *Engine Compartment Components* | *B55 Engine Hood Switch* |
| B59L | Front Impact Sensor - Left | — | In the engine compartment, left front, at the bottom of the radiator core support | *Engine Compartment Components* | *B59L Front Impact Sensor - Left* |
| B59R | Front Impact Sensor - Right | — | In the engine compartment, right front, at the bottom of the radiator core support | *Engine Compartment Components* | *B59R Front Impact Sensor - Right* |
| B61P | Seat Belt Tension Sensor - Passenger | — | In the passenger compartment, at the base of the B-pillar, part of the passenger seat belt retractor pretensioner | *Passenger Compartment - Right Rear (Regular Cab)* | *B61P Seat Belt Tension Sensor - Passenger (AL0)* |
| B63LF | Side Impact Sensor - Left Front | — | At the left front of the passenger compartment, mounted inside the left front door, at the bottom | *Driver Door Components* | *B63LF Side Impact Sensor - Left Front* |
| B63LR | Side Impact Sensor - Left Rear | Extended Cab/ Crew Cab | At the left rear of the passenger compartment, mounted inside the left rear door, at the bottom | *Right Rear Door Components (Extended Cab/Crew Cab)* | *B63LR Side Impact Sensor - Left Rear* |
| B63RF | Side Impact Sensor - Right Front | — | At the right front of the passenger compartment, mounted inside the right front door, at the bottom | *Passenger Door Components* | *B63RF Side Impact Sensor - Right Front* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| B63RR | Side Impact Sensor - Right Rear | Extended Cab/ Crew Cab | At the right rear of the passenger compartment, mounted inside the right rear door, at the bottom | *Left Rear Door Components (Extended Cab/Crew Cab)* | *B63RR Side Impact Sensor - Right Rear* |
| B65 | Intake Manifold Pressure and Air Temperature Sensor | LM2 | In the engine compartment, left side of engine, mounted to the intake manifold, near Q18A Fuel Pressure Regulator 1 | • *Engine Components - Left Rear (LM2)*<br>• *Engine Components - Left Front (L3B)* | • *B65 Intake Manifold Pressure and Air Temperature Sensor (L3B)*<br>• *B65 Intake Manifold Pressure and Air Temperature Sensor (LM2)* |
| B68A | Knock Sensor 1 | L3B/L82/L84/ L87/LV3 | • (L3B) In the engine compartment, left side of engine, mounted to the front of the engine block, below Q17A Fuel Injector 1 and Q17B Fuel Injector 2<br>• (L82/L84/L87) In the engine compartment, left side of engine, mounted to the rear of the engine block, below exhaust manifold | • *Engine Components - Left (LV3)*<br>• *Engine Components - Left Front (L82/L84/L87)*<br>• *Engine Components - Left Rear (L3B)* | • *B68A Knock Sensor 1 (L3B)*<br>• *B68A Knock Sensor 1 (-LM2)* |
| B68B | Knock Sensor 2 | L3B/L82/L84/ L87/LV3 | • (L3B) In the engine compartment, left side of engine, mounted to the front of the block, below Q17C Fuel Injector 3and Q17D Fuel Injector 4<br>• (L82/L84/L87) In the engine compartment, right rear, mounted to right rear side of engine block, behind M64 Starter Motor | • *Engine Components - Left Rear (L3B)*<br>• *Engine Components - Right (LV3)*<br>• *Engine Components - Right Front (L82/L84/L87)* | • *B68B Knock Sensor 2 (L3B)*<br>• *B68B Knock Sensor 2 (-LM2)* |
| B74 | Manifold Absolute Pressure Sensor | L3B/L82/L84/ L87/LV3 | (L82/L84/L87/LV3) In the engine compartment, front center, mounted to intake manifold, to the left of Q38 Throttle Body | • *Engine Components - Left (LV3)*<br>• *Engine Components - Right Front (L82/L84/L87)* | • *B74 Manifold Absolute Pressure Sensor (L82/L84/ L87)*<br>• *B74 Manifold Absolute Pressure Sensor (LV3)* |
| B75C | Multifunction Intake Air Sensor | — | Right front of the engine compartment, mounted in the air cleaner assembly | • *Engine Components - Left (LV3)*<br>• *Engine Components - Left Front (L82/L84/L87)*<br>• *Engine Components - Right Rear (LM2)* | *B75C Multifunction Intake Air Sensor* |
| B80 | Park Brake Switch | — | In the passenger compartment, at the left lower side of the instrument panel | *Instrument Panel - Front* | *B80 Park Brake Switch* |
| B81B | Park Position Switch | — | In the passenger compartment, left front, inside of S3 Transmission Shift Lever | — | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| B87 | Rearview Camera | UVB/UVC/UV2/UVI | Outside the vehicle, at the top middle of the tailgate, mounted in the tailgate handle | • *Endgate Components (QK2)*<br>• *Endgate Components (QT6)* | • *B87 Rearview Camera (UVB)*<br>• *B87 Rearview Camera (UVC)*<br>• *B87 Rearview Camera (UVI/UV2)* |
| B88D | Seat Belt Switch - Driver | — | In the passenger compartment, at the inboard side of the driver seat, part of the seat belt buckle | *Driver Seat Components* | • *B88D Seat Belt Switch - Driver (A2S)*<br>• *B88D Seat Belt Switch - Driver (A2X)* |
| B88P | Seat Belt Switch - Passenger | — | In the passenger compartment, at the inboard side of the passenger seat, part of the seat belt buckle | *Passenger Seat Components* | • *B88P Seat Belt Switch - Passenger (A7E)*<br>• *B88P Seat Belt Switch - Passenger (A7K)* |
| B96 | Cylinder Head Temperature Sensor | LM2 | In the engine compartment, center, near inline connector X160 Engine Harness to Fuel Injector Harness | — | *B96 Cylinder Head Temperature Sensor (LM2)* |
| B107 | Accelerator Pedal Position Sensor | — | In the passenger compartment, in the driver side footwell, under the instrument panel | *Behind Instrument Panel - Left* | *B107 Accelerator Pedal Position Sensor* |
| B110 | Battery Sensor Module | KL9 | In the engine compartment, right side, near C1 Battery negative cable | *Engine Compartment Components* | • *B110 Battery Sensor Module X1 (Crew Cab/Extended Cab)*<br>• *B110 Battery Sensor Module X1 (Regular Cab)*<br>• *B110 Battery Sensor Module X2 (KL9)* |
| B111B | Turbocharger Boost/Intake Air Temperature Sensor | L3B/LM2 | In the engine compartment, behind the grille, attached to the upper left corner of the charge air cooler | — | — |
| B118B | Windshield Washer Fluid Level Switch | — | In the engine compartment, attached to the washer fluid reservoir, behind E13LA Headlamp Assembly - Left | *Engine Compartment Components* | *B118B Windshield Washer Fluid Level Switch* |
| B130A | Exhaust Gas Recirculation Temperature Sensor 1 | LM2 | In the engine compartment, right front, mounted in exhaust, in front of B154 Diesel Particulate Filter Exhaust Differenatial Pressure Sensor | *Engine Components - Right Rear (LM2)* | *B130A Exhaust Gas Recirculation Temperature Sensor 1 (LM2)* |
| B130AH | Exhaust Gas Recirculation Temperature Sensor 1 - High Pressure | LM2 | In the engine compartment, right side, beneath M103 Turbocharger Vane Position Actuator | — | *B130AH Exhaust Gas Recirculation Temperature Sensor 1 - High Pressure (LM2)* |
| B130B | Exhaust Gas Recirculation Temperature Sensor 2 | LM2 | In the engine compartment, right front, mounted in exhaust, near Q61 Reductant Injector | *Engine Components - Right Rear (LM2)* | *B130B Exhaust Gas Recirculation Temperature Sensor 2 (LM2)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| B130BH | Exhaust Gas Recirculation Temperature Sensor 2 - High Pressure | LM2 | In the engine compartment, left rear side of engine | — | *B130BH Exhaust Gas Recirculation Temperature Sensor 2 - High Pressure (LM2)* |
| B130C | Exhaust Gas Recirculation Temperature Sensor 3 | LM2 | In the engine compartment, mounted in exhaust, near M64 Starter Motor | — | *B130C Exhaust Gas Recirculation Temperature Sensor 3 (LM2)* |
| B136 | Exhaust Particulate Matter Sensor | LM2 | On the underbody, mounted to the inboard side of the right frame rail, forward of the right rear shock | — | *B136 Exhaust Particulate Matter Sensor (LM2)* |
| B137B | Power Steering Shaft Torque/Position Sensor | — | Under the vehicle, part of the steering gear assembly | — | — |
| B139 | Transfer Case 2WD/4WD Actuator Position Sensor | NP0/NQH | Under the vehicle, mounted to the transfer case | — | *B139 Transfer Case 2WD/4WD Actuator Position Sensor (NP0/NQH)* |
| B150 | Fuel Tank Pressure Sensor | L3B/L82/L84/L87/LV3 | Under the vehicle, at the top of the fuel tank | — | *B150 Fuel Tank Pressure Sensor (-LM2)* |
| B152LF | Suspension Position Sensor - Left Front | Z45 | Under the vehicle, at the left front corner of the frame | — | *B152LF Suspension Position Sensor - Left Front (Z45)* |
| B152R | Suspension Position Sensor - Rear | Z45 | Under the vehicle, at the rear of the vehicle | — | *B152R Suspension Position Sensor - Rear (Z45)* |
| B152RF | Suspension Position Sensor - Right Front | Z45 | Under the vehicle, at the right front corner of the frame | — | *B152RF Suspension Position Sensor - Right Front (Z45)* |
| B153D | Seat Belt Buckle - Driver | — | In the passenger compartment, at the inboard side of the drive seat | — | — |
| B153P | Seat Belt Buckle - Passenger | — | In the passenger compartment, at the inboard side of the passenger seat | — | — |
| B154 | Diesel Particulate Filter Exhaust Differential Pressure Sensor | LM2 | In the engine compartment, right side, mounted in the exhaust, in front of M103 Turborcharger Vane Position Actuator | *Engine Components - Right Rear (LM2)* | *B154 Diesel Particulate Filter Exhaust Differential Pressure Sensor (LM2)* |
| B160 | Windshield Temperature and Inside Moisture Sensor | — | In the passenger compartment, front center, mounted to top of windshield | *Headliner Components* | *B160 Windshield Temperature and Inside Moisture Sensor (ASV)* |
| B172LF | Brake Pad Wear Sensor - Left Front | — | Under the vehicle, at left front caliper | — | *B172LF Brake Pad Wear Sensor - Left Front* |
| B172LR | Brake Pad Wear Sensor - Left Rear | — | Under the vehicle, at left rear caliper | *Brake and Suspension Components* | *B172LR Brake Pad Wear Sensor - Left Rear* |
| B174G | Frontview Camera - Grille | UV2 | At the front of the vehicle, near the grille | • *Front of Vehicle Components (Chevrolet)*<br>• *Front of Vehicle Components (GMC)* | *B174G Frontview Camera - Grille (UV2)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| B174W | Frontview Camera - Windshield | ASV | In the passenger compartment, at the top middle of the windshield | *Headliner Components* | *B174W Frontview Camera - Windshield (UEU/UHX)* |
| B193A | Charge Air Cooler Inlet Temperature Sensor | LM2 | In the engine compartment, mounted to the left side of the air charge cooler | *Engine Components - Right Rear (LM2)* | *B193A Charge Air Cooler Inlet Temperature Sensor (LM2)* |
| B193B | Charge Air Cooler Outlet Temperature Sensor | LM2 | In the engine compartment, mounted to the front of the air charge cooler | *Engine Components - Right Rear (LM2)* | *B193B Charge Air Cooler Outlet Temperature Sensor (LM2)* |
| B195A | Nitrogen Oxides Sensor 1 | LM2 | In the engine compartment, attached to the exhaust pipe, on the top left rear side of the engine | *Engine Components - Right Rear (LM2)* | *B195A Nitrogen Oxides Sensor 1 (LM2)* |
| B195B | Nitrogen Oxides Sensor 2 | LM2 | Under the vehicle, attached to the exhaust pipe, at the middle of the diesel particulate filter | — | *B195B Nitrogen Oxides Sensor 2 (LM2)* |
| B195C | Nitrogen Oxides Sensor 3 | LM2 | Under the vehicle, attached to the exhaust pipe | — | *B195C Nitrogen Oxides Sensor 3 (LM2)* |
| B198 | Fuel Composition Sensor | — | Under the vehicle, mounted to the left side of the frame | — | *B198 Fuel Composition Sensor (FHS)* |
| B203 | Radiator Coolant Temperature Sensor | L3B/LM2 | In the engine compartment, right front, attached to the right side of the radiator | *Radiator Support Components (LM2)* | *B203 Radiator Coolant Temperature Sensor (L3B/LM2)* |
| B212 | Reductant Sensor Module | LM2 | Under the vehicle, right side, attached to DEF tank | — | *B212 Reductant Sensor Module (LM2)* |
| B214 | Reductant Temperature Sensor | LM2 | Internal to the reductant pump and sensor assembly | — | — |
| B218L | Side Object Sensor Module - Left | UKC | Outside of the vehicle, left rear corner, mounted to the inside of the rear bumper | *Rear Bumper Components* | *B218L Side Object Sensor Module - Left (UKC)* |
| B218R | Side Object Sensor Module - Right | UKC | Outside of the vehicle, right rear corner, mounted to the inside of the rear bumper | *Rear Bumper Components* | *B218R Side Object Sensor Module - Right (UKC)* |
| B225L | Sideview Camera - Left | UVI/UV2 | Outside of vehicle, left side, within A9A Outside Rearview Mirror - Driver | *Driver Door Components* | *B225L Sideview Camera - Left (UV2/UVI)* |
| B225R | Sideview Camera - Right | UVI/UV2 | Outside of vehicle, right side, within A9B Outside Rearview Mirror - Passenger | *Passenger Door Components* | *B225R Sideview Camera - Right (UV2/UVI)* |
| B280 | Automatic Transmission Accumulator Solenoid Valve | MQE | Under the vehicle, inside T12 Automatic Transmission Assembly | — | *B280 Automatic Transmission Accumulator Solenoid Valve (MQE)* |
| B303 | Transmission Range Sensor | MQB | Under the vehicle, center, within T12 Automatic Transmission Assembly | — | *B303 Transmission Range Sensor (MQB)* |
| B306A | Parking Assist Sensor - Front Left Outer | UD5 | At the front of the vehicle, left side, mounted in the front bumper | • *Front of Vehicle Components (Chevrolet)*<br>• *Front of Vehicle Components (GMC)* | *B306A Parking Assist Sensor - Front Left Outer (UD5)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| B306B | Parking Assist Sensor - Front Left Middle | UD5 | At the front of the vehicle, left of center, mounted in the front bumper | • *Front of Vehicle Components (Chevrolet)*<br>• *Front of Vehicle Components (GMC)* | *B306B Parking Assist Sensor - Front Left Middle (UD5)* |
| B306C | Parking Assist Sensor - Front Right Middle | UD5 | At the front of the vehicle, right of center, mounted in the front bumper | • *Front of Vehicle Components (Chevrolet)*<br>• *Front of Vehicle Components (GMC)* | *B306C Parking Assist Sensor - Front Right Middle (UD5)* |
| B306D | Parking Assist Sensor - Front Right Outer | UD5 | At the front of the vehicle, right side, mounted in the front bumper | • *Front of Vehicle Components (Chevrolet)*<br>• *Front of Vehicle Components (GMC)* | *B306D Parking Assist Sensor - Front Right Outer (UD5)* |
| B306E | Parking Assist Sensor - Rear Left Outer | UD5/UD7 | At the rear of the vehicle, left side, mounted in the rear bumper | *Rear Bumper Components* | *B306E Parking Assist Sensor - Rear Left Outer (UD5/UD7)* |
| B306F | Parking Assist Sensor - Rear Left Middle | UD5/UD7 | At the rear of the vehicle, left of center, mounted in the rear bumper | *Rear Bumper Components* | *B306F Parking Assist Sensor - Rear Left Middle (UD5/UD7)* |
| B306G | Parking Assist Sensor - Rear Right Middle | UD5/UD7 | At the rear of the vehicle, right of middle, mounted in the rear bumper | *Rear Bumper Components* | *B306G Parking Assist Sensor - Rear Right Middle (UD5/UD7)* |
| B306H | Parking Assist Sensor - Rear Right Outer | UD5/UD7 | At the rear of the vehicle, right side, in the rear bumper | *Rear Bumper Components* | *B306H Parking Assist Sensor - Rear Right Outer (UD5/UD7)* |
| B310 | Fuel Pressure/Temperature Sensor | L3B/L82/L84/L87/LV3 | • (L3B) In the engine compartment, center, under intake manifold, at the front of the fuel rail<br>• (L82/L84/L87/LV3) In the engine compartment, rear center, under intake manifold, at the rear of the driver side fuel rail | • *Engine Components - Left Rear (L3B)*<br>• *Engine Components - Top (L82/L84/L87)*<br>• *Engine Components - Top (LV3)* | • *B310 Fuel Pressure/Temperature Sensor (L3B)*<br>• *B310 Fuel Pressure/Temperature Sensor (LV3/L82/L84/L87)* |
| B321 | Crankcase Pressure Sensor | LM2 | In the engine compartment, rear center, mounted to the right rear side of the valve cover | *Engine Components - Right Rear (LM2)* | *B321 Crankcase Pressure Sensor (LM2)* |
| B338A | Intake Camshaft Profile Actuator Position Sensor 1 | L3B | In the engine compartment, center, mounted to camshaft carrier, left of M129A Intake Camshaft Profile Actuator 1 | *Engine Components - Left Front (L3B)* | *B338A Intake Camshaft Profile Actuator Position Sensor 1 (L3B)* |
| B338B | Intake Camshaft Profile Actuator Position Sensor 2 | L3B | In the engine compartment, center, mounted to camshaft carrier, left of M129D Intake Camshaft Profile Actuator 4 | — | *B338B Intake Camshaft Profile Actuator Position Sensor 2 (L3B)* |
| B339A | Exhaust Camshaft Profile Actuator Position Sensor 1 | L3B | In the engine compartment, center, mounted to the right side of the camshaft carrier | — | *B339A Exhaust Camshaft Profile Actuator Position Sensor 1 (L3B)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| B339B | Exhaust Camshaft Profile Actuator Position Sensor 2 | L3B | In the engine compartment, center, mounted to the right side of the camshaft carrier | — | *B339B Exhaust Camshaft Profile Actuator Position Sensor 2 (L3B)* |
| B345R | Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation | LM2 | Mounted to the exhaust | — | *B345R Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation (LM2)* |
| C1 | Battery | — | In the engine compartment, on the right side | — | — |
| E2A | Marker Lamp - Endgate | QT5/QT6 | Outside the vehicle, at the bottom middle of the tailgate | • *Endgate Components (QK2)*<br>• *Endgate Components (QT6)* | *E2A Marker Lamp - Endgate* |
| E2LF | Side Marker Lamp - Left Front | — | At the left front of vehicle, within E13LA Headlamp Assembly - Left | • *Headlamps - Base Level (Chevrolet)*<br>• *Headlamps - Base Level (GMC)*<br>• *Headlamps - Mid Level (Chevrolet)*<br>• *Headlamps - Up Level (Chevrolet)*<br>• *Headlamps - Up Level (GMC)* | *E2LF Side Marker Lamp - Left Front (GF2/GF5/GPZ)* |
| E2LR | Side Marker Lamp - Left Rear | — | At the left rear of vehicle, within E42L Tail Lamp Assembly - Left | • *Tail Lamp Assemblies - Base Level (Chevrolet)*<br>• *Tail Lamp Assemblies - Base Level (GMC)*<br>• *Tail Lamp Assemblies - Up Level (Chevrolet)*<br>• *Tail Lamp Assemblies - Up Level (GMC)* | *E2LR Side Marker Lamp - Left Rear (GF3/GF5)* |
| E2RF | Side Marker Lamp - Right Front | — | At the right front of vehicle, within E13RA Headlamp Assembly - Right | • *Headlamps - Base Level (Chevrolet)*<br>• *Headlamps - Base Level (GMC)*<br>• *Headlamps - Mid Level (Chevrolet)*<br>• *Headlamps - Up Level (Chevrolet)*<br>• *Headlamps - Up Level (GMC)* | *E2RF Side Marker Lamp - Right Front (GF2/GF5/GPZ)* |
| E2RR | Side Marker Lamp - Right Rear | — | At the right rear of vehicle, within E42R Tail Lamp Assembly - Right | • *Tail Lamp Assemblies - Base Level (Chevrolet)*<br>• *Tail Lamp Assemblies - Base Level (GMC)*<br>• *Tail Lamp Assemblies - Up Level (Chevrolet)*<br>• *Tail Lamp Assemblies - Up Level (GMC)* | *E2RR Side Marker Lamp - Right Rear (GF3/GF5)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| E4C | Daytime Running Lamp - Left | — | At the front of vehicle, left front corner, within E13LA Headlamp Assembly - Left | • *Headlamps - Base Level (GMC)*<br>• *Headlamps - Mid Level (Chevrolet)*<br>• *Headlamps - Up Level (Chevrolet)*<br>• *Headlamps - Up Level (GMC)* | — |
| E4D | Daytime Running Lamp - Right | — | At the front of vehicle, right front corner, within E13RA Headlamp Assembly - Right | • *Headlamps - Base Level (GMC)*<br>• *Headlamps - Mid Level (Chevrolet)*<br>• *Headlamps - Up Level (Chevrolet)*<br>• *Headlamps - Up Level (GMC)* | — |
| E4E | Headlamp - Left High Beam | X88+Base | At the left front of vehicle, within E13LA Headlamp Assembly - Left | *Headlamps - Base Level (Chevrolet)* | *E4E Headlamp - Left High Beam (GF2/GF5/GPZ)* |
| E4F | Headlamp - Right High Beam | X88+Base | At the right front of vehicle, within E13RA Headlamp Assembly - Right | *Headlamps - Base Level (Chevrolet)* | *E4F Headlamp - Right High Beam (GF2/GF5/GPZ)* |
| E4G | Headlamp - Left Low Beam | X88+Base | At the left front of vehicle, within E13LA Headlamp Assembly - Left | *Headlamps - Base Level (Chevrolet)* | *E4G Headlamp - Left Low Beam (GF2/GF5/GPZ)* |
| E4H | Headlamp - Right Low Beam | X88+Base | At the right front of vehicle, within E13RA Headlamp Assembly - Right | *Headlamps - Base Level (Chevrolet)* | *E4H Headlamp - Right Low Beam (GF2/GF5/GPZ)* |
| E4LF | Turn Signal Lamp - Left Front | — | At the front of vehicle, left front corner, within E13LA Headlamp Assembly - Left | • *Headlamps - Base Level (GMC)*<br>• *Headlamps - Mid Level (Chevrolet)*<br>• *Headlamps - Up Level (Chevrolet)*<br>• *Headlamps - Up Level (GMC)* | *E4LF Turn Signal Lamp - Left Front (GF3/GF4/GF9/GFC)* |
| E4N | Park/Turn Signal Lamp - Left | X88+Base | At the left front of vehicle, within E13LA Headlamp Assembly - Left | *Headlamps - Base Level (Chevrolet)* | *E4N Park/Turn Signal Lamp - Left (GF2/GF5/GPZ)* |
| E4P | Park/Turn Signal Lamp - Right | X88+Base | At the right front of vehicle, within E13RA Headlamp Assembly - Right | *Headlamps - Base Level (Chevrolet)* | *E4P Park/Turn Signal Lamp - Right (GF2/GF5/GPZ)* |
| E4RF | Turn Signal Lamp - Right Front | — | At the front of vehicle, right front corner, within E13RA Headlamp Assembly - Right | • *Headlamps - Base Level (GMC)*<br>• *Headlamps - Mid Level (Chevrolet)*<br>• *Headlamps - Up Level (Chevrolet)*<br>• *Headlamps - Up Level (GMC)* | *E4RF Turn Signal Lamp - Right Front (GF3/GF4/GF9/GFC)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| E5A | Backup Lamp - Left | — | At the rear of vehicle, left rear corner, within E42L Taillamp Assembly - Left | • *Tail Lamp Assemblies - Base Level (Chevrolet)*<br>• *Tail Lamp Assemblies - Base Level (GMC)*<br>• *Tail Lamp Assemblies - Up Level (Chevrolet)*<br>• *Tail Lamp Assemblies - Up Level (GMC)* | *E5A Backup Lamp - Left (GF3/GF5/GFF/GFI/GFJ)* |
| E5AG | Tail/Stop and Turn Signal Lamp - Left Upper | X88+Base | At the left rear of vehicle, within E42L Tail Lamp Assembly - Left | *Tail Lamp Assemblies - Up Level (Chevrolet)* | — |
| E5AH | Tail/Stop and Turn Signal Lamp - Right Upper | X88+Base | At the right rear of vehicle, within E42R Tail Lamp Assembly - Right | • *Tail Lamp Assemblies - Base Level (Chevrolet)*<br>• *Tail Lamp Assemblies - Up Level (Chevrolet)* | — |
| E5AM | Stop/Turn Signal Lamp - Left | — | At the rear of vehicle, left rear corner, within E42L Taillamp Assembly - Left | • *Tail Lamp Assemblies - Base Level (GMC)*<br>• *Tail Lamp Assemblies - Up Level (GMC)* | — |
| E5AN | Stop/Turn Signal Lamp - Right | — | At the rear of vehicle, right rear corner, within E42R Taillamp Assembly - Right | • *Tail Lamp Assemblies - Base Level (GMC)*<br>• *Tail Lamp Assemblies - Up Level (GMC)* | — |
| E5AU | Stop/Turn Signal Lamp - Right Upper | X88+Up Level | At the rear of the vehicle, right rear, within E42R Tail Lamp Assembly - Right | — | — |
| E5B | Backup Lamp - Right | — | At the rear of vehicle, right rear corner, within E42R Taillamp Assembly - Right | • *Tail Lamp Assemblies - Base Level (Chevrolet)*<br>• *Tail Lamp Assemblies - Base Level (GMC)*<br>• *Tail Lamp Assemblies - Up Level (Chevrolet)*<br>• *Tail Lamp Assemblies - Up Level (GMC)* | *E5B Backup Lamp - Right (GF3/GF5/GFF/GFI/GFJ)* |
| E5E | Tail Lamp - Left | — | At the rear of vehicle, left rear corner, within E42L Taillamp Assembly - Left | *Tail Lamp Assemblies - Base Level (GMC)* | — |
| E5F | Tail Lamp - Right | — | At the rear of vehicle, right rear corner, within E42R Taillamp Assembly - Right | *Tail Lamp Assemblies - Base Level (GMC)* | — |
| E5S | Tail/Stop and Turn Signal Lamp - Left | ZW9/Up | At the left rear of vehicle, within E42L Tail Lamp Assembly - Left | — | — |
| E5T | Tail/Stop and Turn Signal Lamp - Right | ZW9/Up | At the right rear of vehicle, within E42R Tail Lamp Assembly - Right | — | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| E5U | Tail/Stop and Turn Signal Lamp - Left Lower | X88+Base | At the left rear of vehicle, within E42L Tail Lamp Assembly - Left | • *Tail Lamp Assemblies - Base Level (Chevrolet)*<br>• *Tail Lamp Assemblies - Up Level (Chevrolet)* | — |
| E5V | Tail/Stop and Turn Signal Lamp - Right Lower | X88+Base | At the right rear of vehicle, within E42R Tail Lamp Assembly - Right | • *Tail Lamp Assemblies - Base Level (Chevrolet)*<br>• *Tail Lamp Assemblies - Up Level (Chevrolet)* | — |
| E6 | Center High Mounted Stop Lamp | — | Outside the vehicle, at the top center of the rear window bridge | *Rear of Vehicle Components* | • *E6 Center High Mounted Stop Lamp (Extended Cab/Crew Cab)*<br>• *E6 Center High Mounted Stop Lamp (Regular Cab)* |
| E7 | License Plate Lamp | ZW9 | At the rear of the vehicle, mounted in the middle of the rear bumper | — | *E7 License Plate Lamp (ZW9)* |
| E7L | License Plate Lamp - Left | E63 | Outside the vehicle, mounted in the middle of the rear bumper | *Rear Bumper Components* | *E7L License Plate Lamp - Left (E63)* |
| E7R | License Plate Lamp - Right | E63 | Outside the vehicle, mounted in the middle of the rear bumper | *Rear Bumper Components* | *E7R License Plate Lamp - Right (E63)* |
| E11A | Fuel Heater/Water in Fuel Sensor | — | Under the vehicle, mounted to the bracket above the spare tire | — | *E11A Fuel Heater/ Water in Fuel Sensor (LM2)* |
| E12A | Glow Plug 1 | LM2 | In the engine compartment, In the cylinder head at cylinder 1 | — | *E12A Glow Plug 1 (LM2)* |
| E12B | Glow Plug 2 | LM2 | In the engine compartment, In the cylinder head at cylinder 2 | — | *E12B Glow Plug 2 (LM2)* |
| E12C | Glow Plug 3 | LM2 | In the engine compartment, In the cylinder head at cylinder 3 | — | *E12C Glow Plug 3 (LM2)* |
| E12D | Glow Plug 4 | LM2 | In the engine compartment, In the cylinder head at cylinder 4 | — | *E12D Glow Plug 4 (LM2)* |
| E12E | Glow Plug 5 | LM2 | In the engine compartment, In the cylinder head at cylinder 5 | — | *E12E Glow Plug 5 (LM2)* |
| E12F | Glow Plug 6 | LM2 | In the engine compartment, In the cylinder head at cylinder 6 | — | *E12F Glow Plug 6 (LM2)* |
| E13L | Headlamp - Left | — | At the front of the vehicle, within E13LA Headlamp Assembly - Left | • *Headlamps - Base Level (GMC)*<br>• *Headlamps - Mid Level (Chevrolet)*<br>• *Headlamps - Up Level (Chevrolet)*<br>• *Headlamps - Up Level (GMC)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| E13LA | Headlamp Assembly - Left | — | Outside the vehicle, at the left front corner | • *Front of Vehicle Components (Chevrolet)*<br>• *Front of Vehicle Components (GMC)* | — |
| E13R | Headlamp - Right | — | At the front of vehicle, within E13RA Headlamp Assembly - Right | • *Headlamps - Base Level (GMC)*<br>• *Headlamps - Mid Level (Chevrolet)*<br>• *Headlamps - Up Level (Chevrolet)*<br>• *Headlamps - Up Level (GMC)* | — |
| E13RA | Headlamp Assembly - Right | — | Outside the vehicle, at the right front corner | • *Front of Vehicle Components (Chevrolet)*<br>• *Front of Vehicle Components (GMC)* | — |
| E14A | Seat Heating Element - Driver Back | KA1 | In the passenger compartment, in the driver seat back | — | *E14A Seat Heating Element - Driver Back (KA1)* |
| E14B | Seat Heating Element - Driver Cushion | KA1 | In the passenger compartment, in the driver seat cushion | — | *E14B Seat Heating Element - Driver Cushion (KA1)* |
| E14C | Seat Heating Element - Passenger Back | KA1 | In the passenger compartment, in the passenger seat back | — | *E14C Seat Heating Element - Passenger Back (KA1)* |
| E14D | Seat Heating Element - Passenger Cushion | KA1 | In the passenger compartment, in the passenger seat cushion | — | *E14D Seat Heating Element - Passenger Cushion (KA1)* |
| E14F | Seat Heating Element - Left Rear Cushion | KA6 | In the passenger compartment, in the left rear seat cushion | — | *E14F Seat Heating Element - Left Rear Cushion (KA6)* |
| E14H | Seat Heating Element - Right Rear Cushion | KA6 | In the passenger compartment, in the right rear seat cushion | — | *E14H Seat Heating Element - Right Rear Cushion (KA6)* |
| E15 | Steering Wheel Heater | KI3 | In the passenger compartment, part of the steering wheel | — | — |
| E17D | Outside Rearview Mirror Glass - Driver | DEZ/DLF/UKC | Outside the vehicle, at the front of the driver door, part of A9A Outside Rearview Mirror - Driver | — | — |
| E17P | Outside Rearview Mirror Glass - Passenger | DEZ/DLF/UKC | Outside the vehicle, at the front of the passenger door, part of A9B Outside Rearview Mirror - Passenger | — | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| E18 | Rear Defogger Grid | — | At the rear of the passenger compartment, part of the rear window glass | • *Passenger Compartment - Left Rear (Extended Cab/Crew Cab)*<br>• *Passenger Compartment - Left Rear (Regular Cab)*<br>• *Passenger Compartment - Right Rear (Extended Cab/Crew Cab)*<br>• *Passenger Compartment - Right Rear (Regular Cab)* | • *E18 Rear Defogger Grid X1*<br>• *E18 Rear Defogger Grid X2* |
| E28 | Center Console Compartment Lamp | D07 | In the passenger compartment, between the front seats, inside the floor console storage bin | *Floor Console Components* | *E28 Center Console Compartment Lamp* |
| E29LF | Fog Lamp - Left Front | T3U | Outside the vehicle, at the left front corner, in the front bumper, below E13LA Headlight Assembly - Left | • *Front of Vehicle Components (Chevrolet)*<br>• *Front of Vehicle Components (GMC)* | *E29LF Fog Lamp - Left Front (T3U)* |
| E29RF | Fog Lamp - Right Front | T3U | Outside the vehicle, at the right front corner, in the front bumper, below E13RA Headlamp Assembly - Right | • *Front of Vehicle Components (Chevrolet)*<br>• *Front of Vehicle Components (GMC)* | *E29RF Fog Lamp - Right Front (T3U)* |
| E31L | Sunshade Mirror Lamp - Left | DH6 | In the passenger compartment, at the left front of the headliner, part of A3L Sunshade - Left | — | *E31L Sunshade Mirror Lamp - Left (DH6)* |
| E31R | Sunshade Mirror Lamp - Right | DH6 | In the passenger compartment, at the right front of the headliner, part of A3R Sunshade - Right | — | *E31R Sunshade Mirror Lamp - Right (DH6)* |
| E33L | Cargo Lamp - Left | — | Outside the vehicle, beneath the top of the left side of the bed | — | *E33L Cargo Lamp - Left (UF2)* |
| E33R | Cargo Lamp - Right | — | Outside the vehicle, beneath the top of the right side of the bed | — | *E33R Cargo Lamp - Right (UF2)* |
| E37B | Dome/Reading Lamps - 2nd Row | Extended Cab/ Crew Cab | In the passenger compartment, near the center of the headliner | *Headliner Components* | *E37B Dome/Reading Lamps - 2nd Row (Extended Cab/Crew Cab)* |
| E40 | Electrical Auxiliary Heater | C32 | In the passenger compartment, at the top of the HVAC box | — | • *E40 Electrical Auxiliary Heater X1 (C32)*<br>• *E40 Electrical Auxiliary Heater X2 (C32)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| E42L | Tail Lamp Assembly - Left | — | Outside the vehicle, at the left rear corner of the vehicle | *Rear of Vehicle Components* | • *E42L Tail Lamp Assembly - Left (GF2/GF4/GF9/GFC/GFD/GPZ)*<br>• *E42L Tail Lamp Assembly - Left (GFF/GFI/GFJ)*<br>• *E42L Tail Lamp Assembly - Left (GFG/GFU/GFW)* |
| E42R | Tail Lamp Assembly - Right | — | Outside the vehicle, at the right rear corner of the vehicle | *Rear of Vehicle Components* | • *E42R Tail Lamp Assembly - Right (GF2/GF4/GF9/GFC/GFD/GPZ)*<br>• *E42R Tail Lamp Assembly - Right (GFF/GFI/GFJ)*<br>• *E42R Tail Lamp Assembly - Right (GFG/GFU/GFW)* |
| E52 | Reductant Line Heater | LM2 | Internal to the reductant pump and sensor assembly | — | *E52 Reductant Line Heater (LM2)* |
| E53 | Reductant Tank Heater | LM2 | Internal to the reductant pump and sensor assembly | — | — |
| E63D | Flood Lamp - Driver Door Handle | — | In the passenger compartment, in the driver door handle trim panel | *Driver Door Trim Components* | *E63D Flood Lamp - Driver Door Handle (AU3)* |
| E63P | Flood Lamp - Passenger Door Handle | — | In the passenger compartment, in the passenger door handle trim panel | *Passenger Door Trim Components* | *E63P Flood Lamp - Passenger Door Handle (AU3)* |
| E90DF | Exterior Flood Lamp - Driver Outside Rearview Mirror Forward | DEZ/DLF | Outside of the vehicle, at the front of A9A Outside Rearview Mirror - Driver | *Driver Door Components* | — |
| E90DL | Exterior Flood Lamp - Driver Outside Rearview Mirror Lower | DEZ | Outside of the vehicle, at the bottom of A9A Outside Rearview Mirror - Driver | *Driver Door Components* | — |
| E90PF | Exterior Flood Lamp - Passenger Outside Rearview Mirror Forward | DEZ/DLF | Outside of the vehicle, at the front of A9B Outside Rearview Mirror - Passenger | *Passenger Door Components* | — |
| E90PL | Exterior Flood Lamp - Passenger Outside Rearvew Mirror Lower | DEZ | Outside of the vehicle, at the bottom of A9B Outside Rearview Mirror - Passenger | *Passenger Door Components* | — |
| F101 | Passenger Instrument Panel Air Bag | — | In the passenger compartment, behind the instrument panel upper glove box | — | • *F101 Passenger Instrument Panel Air Bag X1*<br>• *F101 Passenger Instrument Panel Air Bag X2* |
| F105L | Roof Rail Air Bag - Left | — | In the passenger compartment, along the left side of the headliner | • *Passenger Compartment - Left Front (Extended Cab/Crew Cab)*<br>• *Passenger Compartment - Left Rear (Regular Cab)* | • *F105L Roof Rail Air Bag - Left (Crew Cab)*<br>• *F105L Roof Rail Air Bag - Left (Extended Cab)*<br>• *F105L Roof Rail Air Bag - Left (Regular Cab)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| F105R | Roof Rail Air Bag - Right | — | In the passenger compartment, along the right side of the headliner | *Passenger Compartment - Right Rear (Regular Cab)* | • *F105R Roof Rail Air Bag - Right (Crew Cab)*<br>• *F105R Roof Rail Air Bag - Right (Extended Cab)*<br>• *F105R Roof Rail Air Bag - Right (Regular Cab)* |
| F106D | Seat Side Air Bag - Driver | — | In the passenger compartment, in the outboard side of the driver seat back | *Driver Seat Components* | *F106D Seat Side Air Bag - Driver* |
| F106P | Seat Side Air Bag - Passenger | — | In the passenger compartment, in the outboard side of the passenger seat back | *Passenger Seat Components* | *F106P Seat Side Air Bag - Passenger* |
| F107 | Steering Wheel Air Bag | — | In the passenger compartment, mounted to the middle of the steeing wheel | — | • *F107 Steering Wheel Air Bag X1*<br>• *F107 Steering Wheel Air Bag X2* |
| F112D | Seat Belt Retractor Pretensioner - Driver | — | In the passenger compartment, at the base of the driver side B-pillar | • *Passenger Compartment - Left Front (Extended Cab/Crew Cab)*<br>• *Passenger Compartment - Left Rear (Regular Cab)* | • *F112D Seat Belt Retractor Pretensioner - Driver (Crew Cab/Extended Cab)*<br>• *F112D Seat Belt Retractor Pretensioner - Driver (Regular Cab)* |
| F112P | Seat Belt Retractor Pretensioner - Passenger | — | In the passenger compartment, at the base of the passenger side B-pillar | *Passenger Compartment - Right Rear (Regular Cab)* | • *F112P Seat Belt Retractor Pretensioner - Passenger (Crew Cab/ Extended Cab)*<br>• *F112P Seat Belt Retractor Pretensioner - Passenger (Regular Cab)* |
| F113D | Seat Belt Anchor Pretensioner - Driver | — | In the passenger compartment, mounted to the outboard driver seat track | • *Passenger Compartment - Left Front (Extended Cab/Crew Cab)*<br>• *Passenger Compartment - Left Rear (Regular Cab)* | *F113D Seat Belt Anchor Pretensioner - Driver* |
| F113P | Seat Belt Anchor Pretensioner - Passenger | — | In the passenger compartment, mounted to the outboard passenger seat track | *Passenger Compartment - Right Rear (Regular Cab)* | *F113P Seat Belt Anchor Pretensioner - Passenger* |
| G1 | A/C Compressor | — | • (LM2) In the engine compartment, left front, mounted to the left lower side of the engine<br>• | • *Engine Components - Left Rear (LM2)*<br>• *Engine Components - Right (LV3)*<br>• *Engine Components - Right Front (L82/L84/L87)* | — |
| G5 | Transmission Fluid Pump - Electric/ Auxiliary | MQB | Under the vehicle, within T12 Automatic Transmission Assembly | — | *G5 Transmission Fluid Pump - Electric/ Auxiliary (MQB)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| G10B | Cooling Fan Motor - Lower | — | In the engine compartment, in the radiator shroud, lower | *Radiator Support Components (LM2)* | • *G10B Cooling Fan Motor - Lower (L3B)*<br>• *G10B Cooling Fan Motor - Lower (LM2)* |
| G10L | Cooling Fan Motor - Left | — | In the engine compartment, in the radiator shroud, left side | • *Radiator Support Components (LM2)*<br>• *Radiator Support Components (LV3)* | *G10L Cooling Fan Motor - Left* |
| G10R | Cooling Fan Motor - Right | — | In the engine compartment, in the radiator shroud, right side | • *Radiator Support Components (LM2)*<br>• *Radiator Support Components (LV3)* | • *G10R Cooling Fan Motor - Right (LM2)*<br>• *G10R Cooling Fan Motor - Right (-LM2)* |
| G12 | Fuel Pump | — | Under the vehicle, within the fuel tank, part of A7 Fuel Pump and Level Sender Assembly | — | — |
| G13 | Generator | — | • (LM2) In the engine compartment, left front, mounted to the left upper side of the engine | • *Engine Components - Left Front (L3B)*<br>• *Engine Components - Left Rear (LM2)*<br>• *Engine Components - Right (LV3)* | • *G13 Generator X1 (L3B)*<br>• *G13 Generator X1 (L82/LM2)*<br>• *G13 Generator X1 (L84/L87)*<br>• *G13 Generator X1 (LV3)*<br>• *G13 Generator X2* |
| G17 | Heater Coolant Pump | L84/L87/LM2 | In the engine compartment, front center, mounted to the front of the engine | *Engine Components - Right Front (L82/L84/L87)* | *G17 Heater Coolant Pump (L84/L87/LM2)* |
| G18 | High Pressure Fuel Pump | — | • (L3B) In the engine compartment, rear center, mounted on top of the rear of the camshaft carrier<br>• (L82/L84/L87/LV3) In the engine compartment, rear center, beneath the rear of the intake manifold<br>• (LM2) In the engine compartment, left rear, mounted near the left side of the transmission bellhousing | • *Engine Components - Right Front (L3B)*<br>• *Engine Components - Top (L82/L84/L87)*<br>• *Engine Components - Top (LV3)* | • *G18 High Pressure Fuel Pump (L3B)*<br>• *G18 High Pressure Fuel Pump (L82/L84/L87/LV3)* |
| G24 | Windshield Washer Pump | — | In the engine compartment, attached to the washer fluid reservoir, behind E13LA Headlamp Assembly - Left | *Engine Compartment Components* | *G24 Windshield Washer Pump* |
| G33 | Reductant Pump | LM2 | Internal to the reductant pump and sensor assembly | — | — |
| G58 | Evaporative Emission Purge Pump | L3B | In the engine compartment, center, mounted above the intake manifold, to the left of the camshaft carrier | *Engine Components - Left Front (L3B)* | *G58 Evaporative Emission Purge Pump (L3B)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| G59 | Engine Coolant Pump | L3B/LM2 | • (L3B) In the engine compartment, right front, beneath turbocharger | *Engine Components - Right Front (L3B)* | • *G59 Engine Coolant Pump (L3B)*<br>• *G59 Engine Coolant Pump (LM2)* |
| K4 | Assist Step Control Module | — | Underneath the vehicle, along the outside of the left frame rail, near the driver door | — | • *K4 Assist Step Control Module X1 (BRS)*<br>• *K4 Assist Step Control Module X2 (BRS)* |
| K9 | Body Control Module | — | In the passenger compartment, behind the driver side of the instrument panel, outboard of the steering column | • *Behind Instrument Panel - Left*<br>• *Instrument Panel - Rear* | • *K9 Body Control Module X1*<br>• *K9 Body Control Module X2*<br>• *K9 Body Control Module X3*<br>• *K9 Body Control Module X4*<br>• *K9 Body Control Module X5*<br>• *K9 Body Control Module X6*<br>• *K9 Body Control Module X7* |
| K19 | Suspension Control Module | — | Under the vehicle, mounted to the bracket above the spare tire | — | *K19 Suspension Control Module (Z45)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| K20 | Engine Control Module | — | In the engine compartment, left front, behind E13LA Headlamp Assembly - Left | *Engine Compartment Components* | • *K20 Engine Control Module X1 (L3B)*<br>• *K20 Engine Control Module X1 (L82)*<br>• *K20 Engine Control Module X1 (L84/L87)*<br>• *K20 Engine Control Module X1 (LM2)*<br>• *K20 Engine Control Module X1 (LV3)*<br>• *K20 Engine Control Module X2 (L3B)*<br>• *K20 Engine Control Module X2 (L82)*<br>• *K20 Engine Control Module X2 (L84/L87)*<br>• *K20 Engine Control Module X2 (LM2)*<br>• *K20 Engine Control Module X2 (LV3)*<br>• *K20 Engine Control Module X3 (L3B)*<br>• *K20 Engine Control Module X3 (L82)*<br>• *K20 Engine Control Module X3 (L84/L87)*<br>• *K20 Engine Control Module X3 (LV3)* |
| K29F | Seat Heating Control Module - Front | KQV/KA1 | In the passenger compartment, right front, under the front of the passenger seat | *Passenger Seat Components* | • *K29F Seat Heating Control Module - Front X1 (KA1)*<br>• *K29F Seat Heating Control Module - Front X1 (KQV)*<br>• *K29F Seat Heating Control Module - Front X2 (KA1)*<br>• *K29F Seat Heating Control Module - Front X2 (KQV)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| K29R | Seat Heating Control Module - Rear | KA6 | In the passenger compartment, rear center, underneath the front of the rear seat cushion | *Rear Seat Components* | • *K29R Seat Heating Control Module - Rear X1 (KA6)*<br>• *K29R Seat Heating Control Module - Rear X2 (KA6)* |
| K32 | Steering Wheel Heating Control Module | KI3 | In the passenger compartment, in the steering wheel, behind the driver air bag | — | • *K32 Steering Wheel Heating Control Module X1 (UVD)*<br>• *K32 Steering Wheel Heating Control Module X2 (UVD)* |
| K33 | HVAC Control Module | — | In the passenger compartment, left front, between the instrument panel and bulkhead | *Instrument Panel - Rear* | • *K33 HVAC Control Module X1*<br>• *K33 HVAC Control Module X2*<br>• *K33 HVAC Control Module X3*<br>• *K33 HVAC Control Module X4* |
| K34 | Glow Plug Control Module | LM2 | In the engine compartment, mounted to the top of the engine | — | • *K34 Glow Plug Control Module X1 (LM2)*<br>• *K34 Glow Plug Control Module X2 (LM2)* |
| K36 | Inflatable Restraint Sensing and Diagnostic Module | — | In the passenger compartment, bolted to the floor between the front seats or under console if equipped | • *Passenger Compartment - Left Front (Extended Cab/Crew Cab)*<br>• *Passenger Compartment - Right Rear (Regular Cab)* | • *K36 Inflatable Restraint Sensing and Diagnostic Module X1*<br>• *K36 Inflatable Restraint Sensing and Diagnostic Module X2* |
| K40 | Seat Memory Control Module | A45 | In the passenger compartment, under the driver seat | *Driver Seat Components* | • *K40 Seat Memory Control Module X1 (A45)*<br>• *K40 Seat Memory Control Module X2 (A45)*<br>• *K40 Seat Memory Control Module X3 (A45)*<br>• *K40 Seat Memory Control Module X5 (A45)*<br>• *K40 Seat Memory Control Module X6 (A45)* |
| K43 | Power Steering Control Module | — | Under the vehicle, part of the steering gear assembly | — | • *K43 Power Steering Control Module X1*<br>• *K43 Power Steering Control Module X2* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| K56 | Serial Data Gateway Module | — | In the passenger compartment, left front, between the instrument panel and bulkhead | *Instrument Panel - Rear* | • *K56 Serial Data Gateway Module X1*<br>• *K56 Serial Data Gateway Module X2* |
| K60 | Steering Column Lock Module | BTM | In the passenger compartment, left front, mounted on top of the steering column, underneath instrument panel | *Steering Column Components* | *K60 Steering Column Lock Module (BTM)* |
| K68 | Trailer Lighting Control Module | — | Under the rear of the vehicle, near spare tire | — | *K68 Trailer Lighting Control Module (U1D)* |
| K69 | Transfer Case Control Module | NP0/NQH | In the engine compartment, left rear, left of K160 Brake System Control Module | *Engine Compartment Components* | *K69 Transfer Case Control Module (NP0/ NQH)* |
| K71 | Transmission Control Module | — | • (MQB/MQE) In the engine compartment, left front, behind left corner of the radiator<br>• (MYC) In the engine compartment, inside the T12 Automatic Transmission Assembly, part of the control solenoid valve | — | • *K71 Transmission Control Module (MQB)*<br>• *K71 Transmission Control Module (MQE)* |
| K73 | Telematics Communication Interface Control Module | UE1 | In the passenger compartment, left front, between the instrument panel and bulkhead | *Instrument Panel - Rear* | • *K73 Telematics Communication Interface Control Module X1 (UE1)*<br>• *K73 Telematics Communication Interface Control Module X5 (UE1)*<br>• *K73 Telematics Communication Interface Control Module X7 (UE1)* |
| K77 | Remote Control Door Lock Receiver | — | In the passenger compartment, right rear corner, below headliner | • *Passenger Compartment - Right Rear (Extended Cab/Crew Cab)*<br>• *Passenger Compartment - Right Rear (Regular Cab)* | *K77 Remote Control Door Lock Receiver* |
| K84 | Keyless Entry Control Module | BTM | In the passenger compartment, left front, between the instrument panel and bulkhead | *Behind Instrument Panel - Left* | • *K84 Keyless Entry Control Module X1 (BTM)*<br>• *K84 Keyless Entry Control Module X2 (BTM)* |
| K85 | Passenger Presence Module | — | In the passenger compartment, in the passenger seat cushion | *Passenger Seat Components* | *K85 Passenger Presence Module* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| K89 | Immobilizer Control Module | — | In the passenger compartment, on the left side of the steering column, below S78 Turn Signal/Multifunction Switch | • *Floor Console Components*<br>• *Steering Column Components* | • *K89 Immobilizer Control Module (-BTM)*<br>• *K89 Immobilizer Control Module (BTM+D07)*<br>• *K89 Immobilizer Control Module (BTM-D07)* |
| K111 | Fuel Pump Driver Control Module | — | Under the vehicle, mounted to the bracket above the spare tire | — | *K111 Fuel Pump Driver Control Module* |
| K115 | Reductant Control Module | LM2 | Under the vehicle, mounted to the outboard side of the frame, below the passenger side of the cab | — | *K115 Reductant Control Module (LM2)* |
| K133 | Trailer Brake Power Control Module | JL1 | Under the vehicle, mounted to the bracket above the spare tire | — | *K133 Trailer Brake Power Control Module (JL1)* |
| K157 | Video Processing Control Module | UVI/UV2 | In the passenger compartment, right rear, mounted behind the rear seat, below the rear window | *Passenger Compartment - Right Rear (Extended Cab/Crew Cab)* | • *K157 Video Processing Control Module X1 (UVI/UV2)*<br>• *K157 Video Processing Control Module X3 (UVI/UV2)*<br>• *K157 Video Processing Control Module X4 (UVI/UV2)*<br>• *K157 Video Processing Control Module X5 (UVI/UV2)* |
| K160 | Brake System Control Module | — | In the engine comparment, left rear corner, near brake master cylinder | *Engine Compartment Components* | *K160 Brake System Control Module* |
| K166L | Multifunction LED Control Module - Left Headlamp | — | At the left front of vehicle, within E13LA Headlamp Assembly - Left | • *Headlamps - Up Level (Chevrolet)*<br>• *Headlamps - Up Level (GMC)* | • *K166L Multifunction LED Control Module - Left Headlamp (GFD)*<br>• *K166L Multifunction LED Control Module - Left Headlamp (GFG/GFU/GFW)* |
| K166R | Multifunction LED Control Module - Right Headlamp | — | At the right front of vehicle, within E13RA Headlamp Assembly - Right | • *Headlamps - Up Level (Chevrolet)*<br>• *Headlamps - Up Level (GMC)* | • *K166R Multifunction LED Control Module - Right Headlamp (GFD)*<br>• *K166R Multifunction LED Control Module - Right Headlamp (GFG/GFU/GFW)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| K182 | Parking Assist Control Module | UD5/UD7 | In the passenger compartment, mounted to the driver side of the rear wall | • *Passenger Compartment - Left Rear (Extended Cab/Crew Cab)*<br>• *Passenger Compartment - Left Rear (Regular Cab)* | • *K182 Parking Assist Control Module X1 ((UD5/UD7)+(Crew Cab/Extended Cab))*<br>• *K182 Parking Assist Control Module X1 ((UD5/UD7)+Regular Cab)*<br>• *K182 Parking Assist Control Module X2 (UD5/UD7)*<br>• *K182 Parking Assist Control Module X3 (UD5/UD7)* |
| K194 | Pickup Box Endgate Control Module | QT6 | At the rear of the vehicle, inside of the endgate, behind trim panel, lower left side | *Endgate Components (QT6)* | *K194 Pickup Box Endgate Control Module* |
| K214 | Trailer Tire Pressure Indicator Module | PTT | At the rear of the vehicle, mounted to the center of the rear bumper, near X88 Trailer Connector | — | *K214 Trailer Tire Pressure Indicator Module* |
| M4 | Air Inlet Door Actuator | — | In the passenger compartment, behind the instrument panel glove box | — | *M4 Air Inlet Door Actuator* |
| M6L | Air Temperature Door Actuator - Left | — | In the passenger compartment, part of HVAC module, behind the instrument panel | — | *M6L Air Temperature Door Actuator - Left* |
| M6R | Air Temperature Door Actuator - Right | — | In the passenger compartment, part of HVAC module, behind the instrument panel | — | *M6R Air Temperature Door Actuator - Right (CJ2)* |
| M7 | Transmission Shift Lock Control Solenoid Actuator | — | In the passenger compartment, right side of the steering wheel, attached to transmission shift lever | — | — |
| M8 | Blower Motor | — | In the passenger compartment, under the right side of the instrument panel, above the hush panel | — | *M8 Blower Motor* |
| M26 | Front Axle Engagement Actuator | — | Under the vehicle, mounted to the front axle | — | *M26 Front Axle Engagement Actuator (NP0/NQH)* |
| M37 | Mode Door Actuator | — | In the passenger compartment, right front, within instrument panel, attached to HVAC assembly | — | *M37 Mode Door Actuator* |
| M38 | Power Steering Motor | — | Under the vehicle, part of the steering gear assembly | — | — |
| M50D | Seat Front Vertical Motor - Driver | — | In the passenger compartment, under the driver seat | *Driver Seat Components* | *M50D Seat Front Vertical Motor - Driver* |
| M50P | Seat Front Vertical Motor - Passenger | — | In the passenger compartment, under the passenger seat | *Passenger Seat Components* | *M50P Seat Front Vertical Motor - Passenger (A7K)* |
| M51D | Seat Horizontal Motor - Driver | — | In the passenger compartment, under the driver seat | *Driver Seat Components* | *M51D Seat Horizontal Motor - Driver* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| M51P | Seat Horizontal Motor - Passenger | — | In the passenger compartment, under the passenger seat | *Passenger Seat Components* | *M51P Seat Horizontal Motor - Passenger (A7K)* |
| M55D | Seat Rear Vertical Motor - Driver | — | In the passenger compartment, under the driver seat | — | *M55D Seat Rear Vertical Motor - Driver* |
| M55P | Seat Rear Vertical Motor - Passenger | — | In the passenger compartment, under the passenger seat | *Passenger Seat Components* | *M55P Seat Rear Vertical Motor - Passenger (A7K)* |
| M56D | Seat Recline Motor - Driver | — | In the passenger compartment, in the driver seat back | • *Driver Seat Components*<br>• *Driver Seat Components* | *M56D Seat Recline Motor - Driver* |
| M56P | Seat Recline Motor - Passenger | — | In the passenger compartment, in the passenger seat back | *Passenger Seat Components* | *M56P Seat Recline Motor - Passenger (A7K)* |
| M63 | Sliding Rear Window Motor | A48 | In the passenger compartment, mounted to the passenger side of the rear wall, behind the rear seat | *Passenger Compartment - Right Rear (Extended Cab/Crew Cab)* | *M63 Sliding Rear Window Motor (A48)* |
| M64 | Starter Motor | — | • (L3B) In the engine compartment, left rear, mounted to rear of engine block | • *Engine Components - Left Front (L3B)*<br>• *Engine Components - Right (LV3)*<br>• *Engine Components - Right Front (L82/L84/L87)* | • *M64 Starter Motor X1 (L3B)*<br>• *M64 Starter Motor X1 (L84/L87)*<br>• *M64 Starter Motor X1 (LM2/LV3/L82)*<br>• *M64 Starter Motor X2* |
| M69 | Sunroof Motor | CF5 | In the passenger compartment, at the front of the roof, above the headliner | *Headliner Components* | *M69 Sunroof Motor (CF5)* |
| M73A | Seat Blower Motor - Driver Back | KQV | In the passenger compartment, in the driver seat back | *Driver Seat Components* | *M73A Seat Blower Motor - Driver Back (KQV)* |
| M73B | Seat Blower Motor - Passenger Back | KQV | In the passenger compartment, in the passenger seat cback | — | *M73B Seat Blower Motor - Passenger Back (KQV)* |
| M73C | Seat Blower Motor - Driver Cushion | KQV | In the passenger compartment, in the driver seat cushion | *Driver Seat Components* | *M73C Seat Blower Motor - Driver Cushion (KQV)* |
| M73D | Seat Blower Motor - Passenger Cushion | KQV | In the passenger compartment, in the passenger seat cushion | — | *M73D Seat Blower Motor - Passenger Cushion (KQV)* |
| M74D | Window Motor - Driver | — | In the passenger compartment, in the driver door | *Driver Door Components* | *M74D Window Motor - Driver (AXG)* |
| M74LR | Window Motor - Left Rear | Extended Cab/ Crew Cab | In the passenger compartment, in the left rear door | — | *M74LR Window Motor - Left Rear (AEQ)* |
| M74P | Window Motor - Passenger | — | In the passenger compartment, in the passenger door | *Passenger Door Components* | • *M74P Window Motor - Passenger (AED)*<br>• *M74P Window Motor - Passenger (AEF)* |
| M74RR | Window Motor - Right Rear | Extended Cab/ Crew Cab | In the passenger compartment, in the right rear door | *Left Rear Door Components (Extended Cab/Crew Cab)* | *M74RR Window Motor - Right Rear (AEQ)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| M75 | Windshield Wiper Motor | — | Outside the vehicle, at the left rear of the engine compartment, below the left lower corner of the windshield | *Engine Compartment Components* | *M75 Windshield Wiper Motor* |
| M77D | Outside Rearview Mirror Motor - Driver | — | Outside the vehicle, at the front of the driver door, within the A9A Outside Rearview Mirror - Driver | — | — |
| M77P | Outside Rearview Mirror Motor - Passenger | — | Outside the vehicle, at the front of the passenger door, within the A9B Outside Rearview Mirror - Passenger | — | — |
| M78D | Outside Rearview Mirror Folding Motor - Driver | A45 | Outside the vehicle, at the front of the driver door, within the A9A Outside Rearview Mirror - Driver | — | — |
| M78P | Outside Rearview Mirror Folding Motor - Passenger | A45 | Outside the vehicle, at the front of the passenger door, within the A9B Outside Rearview Mirror - Passenger | — | — |
| M93 | Key Capture Solenoid Actuator | -BTM | In the passenger compartment, left front, on the right side of the steering column, below the transmission shift lever | *Steering Column Components* | *M93 Key Capture Solenoid Actuator (-BTM)* |
| M95L | Assist Step - Left | BRS | Under the vehicle, along the left frame rail, under the driver door | — | *M95L Assist Step - Left (BRS)* |
| M95R | Assist Step - Right | BRS | Under the vehicle, along the right frame rail, under the passenger door | — | *M95R Assist Step - Right (BRS)* |
| M96A | Active Grille Air Shutter 1 Actuator | VTI/WMI | At the front of the vehicle, center, attached to the inside of the front grille | — | *M96A Active Grille Air Shutter 1 Actuator (VTI/WMI)* |
| M96B | Active Grille Air Shutter 2 Actuator | WMI | At the front of the vehicle, center, attached to the inside of the front grille | — | *M96B Active Grille Air Shutter 2 Actuator (WMI)* |
| M103 | Turbocharger Vane Position Actuator | LM2 | In the engine compartment, right side, mounted to turbocharger | *Engine Components - Right Rear (LM2)* | *M103 Turbocharger Vane Position Actuator (LM2)* |
| M104L | Park Brake Actuator - Left | — | Under the vehicle, left rear, attached to the left rear brake caliper | *Brake and Suspension Components* | *M104L Park Brake Actuator - Left* |
| M104R | Park Brake Actuator - Right | — | Under the vehicle, right rear, attached to the right rear brake caliper | *Brake and Suspension Components* | *M104R Park Brake Actuator - Right* |
| M106 | Exhaust Flow Control Valve Actuator | LM2 | In the engine compartment, left side, attached to the left side of the engine block, beneath the intake manifold | *Engine Components - Left Rear (LM2)* | *M106 Exhaust Flow Control Valve Actuator (LM2)* |
| M125 | Pickup Box Endgate Power Assist Actuator | QT6 | Outside of the vehicle, within the endgate, lower right corner | *Endgate Components (QT6)* | *M125 Pickup Box Endgate Power Assist Actuator* |
| M129A | Intake Camshaft Profile Actuator 1 | L3B | In the engine compartment, center, left of T8A Ignition Coil 1 | — | *M129A Intake Camshaft Profile Actuator 1 (L3B)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| M129B | Intake Camshaft Profile Actuator 2 | L3B | In the engine compartment, center, left of T8B Ignition Coil 2 | • *Engine Components - Top (L3B)*<br>• *Engine Components - Top (L3B)* | *M129B Intake Camshaft Profile Actuator 2 (L3B)* |
| M129C | Intake Camshaft Profile Actuator 3 | L3B | In the engine compartment, center, left of T8C Ignition Coil 3 | *Engine Components - Top (L3B)* | *M129C Intake Camshaft Profile Actuator 3 (L3B)* |
| M129D | Intake Camshaft Profile Actuator 4 | L3B | In the engine compartment, center, left of T8D Ignition Coil 4 | *Engine Components - Top (L3B)* | *M129D Intake Camshaft Profile Actuator 4 (L3B)* |
| M130A | Exhaust Camshaft Profile Actuator 1 | L3B | In the engine compartment, center, right of T8B Ignition Coil 2 and T8C Ignition Coil 3 | *Engine Components - Top (L3B)* | — |
| M130B | Exhaust Camshaft Profile Actuator 2 | L3B | In the engine compartment, center, right of T8A Ignition Coil 1 and T8B Ignition Coil 2 | *Engine Components - Top (L3B)* | *M130B Exhaust Camshaft Profile Actuator 2 (L3B)* |
| P12 | Horn | — | In the engine compartment, right front, at the bottom of the radiator core support | *Engine Compartment Components* | *P12 Horn* |
| P16 | Instrument Cluster | — | In the passenger compartment, in the driver side of the instrument panel | *Instrument Panel - Front* | • *P16 Instrument Cluster X1*<br>• *P16 Instrument Cluster X2 (UV6)* |
| P17 | Info Display Module | — | In the passenger compartment, at the center of the instrument panel | *Instrument Panel - Front* | • *P17 Info Display Module X1 (UIR)*<br>• *P17 Info Display Module X1 (UIJ/UIK)*<br>• *P17 Info Display Module X2* |
| P19AC | Speaker - Subwoofer | UQA | In the passenger compartment, under the instrument panel, at the front of the center console | — | *P19AC Speaker - Subwoofer (UQA)* |
| P19AG | Speaker - Left Front Door | — | In the passenger compartment, in the driver door | *Driver Door Components* | *P19AG Speaker - Left Front Door* |
| P19AH | Speaker - Right Front Door | — | In the passenger compartment, in the passenger door | *Passenger Door Components* | *P19AH Speaker - Right Front Door (U95/UQF/UQA)* |
| P19AL | Speaker - Left Rear Door | — | In the passenger compartment, in the left rear door | *Right Rear Door Components (Extended Cab/Crew Cab)* | *P19AL Speaker - Left Rear Door (UQA/UQF)* |
| P19AM | Speaker - Right Rear Door | — | In the passenger compartment, in the right rear door | *Left Rear Door Components (Extended Cab/Crew Cab)* | *P19AM Speaker - Right Rear Door (UQA/UQF)* |
| P19J | Speaker - Left Instrument Panel | — | In the passenger compartment, in the top of the left side of the instrument panel | *Instrument Panel - Rear* | • *P19J Speaker - Left Instrument Panel (UQA)*<br>• *P19J Speaker - Left Instrument Panel (UQF/U95)* |
| P19W | Speaker - Right Instrument Panel | — | In the passenger compartment, in the top of the right side of the instrument panel | *Instrument Panel - Rear* | • *P19W Speaker - Right Instrument Panel (UQA)*<br>• *P19W Speaker - Right Instrument Panel (UQF/U95)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| P29 | Head-Up Display | UV6 | In the passenger compartment, at the left side of the instrument panel, near the windshield | *Instrument Panel - Front* | • *P29 Head-Up Display X1 (UV6)*<br>• *P29 Head-Up Display X2 (UV6)* |
| P34D | Side Object Detection Indicator - Driver | UKC | Outside of the vehicle, left side, part of E17D Outside Rearview Mirror Glass - Driver, within A9A Outside Rearview Mirror - Driver | — | — |
| P34P | Side Object Detection Indicator - Passenger | UKC | Outside of the vehicle, left side, part of E17P Outside Rearview Mirror Glass - Passenger, within A9B Outside Rearview Mirror - Passenger | — | — |
| P43 | Collision Alert Indicators | (UHX/UEU)-UV6 | In the passenger compartment, in the top of the instrument panel, near the windshield, in front of the driver | *Instrument Panel - Rear* | *P43 Collision Alert Indicators ((UEU/UHX)-UV6)* |
| P45LR | Seat Haptic Movement Motor - Driver Left Rear | HS1 | In the passenger compartment, in the left side of the driver seat cushion | — | *P45LR Seat Haptic Movement Motor - Driver Left Rear (HS1)* |
| P45RR | Seat Haptic Movement Motor - Driver Right Rear | HS1 | In the passenger compartment, in the right side of the driver seat cushion | — | *P45RR Seat Haptic Movement Motor - Driver Right Rear (HS1)* |
| Q2 | A/C Compressor Clutch | — | In the engine compartment, left front, part of G1 A/C Compressor | • *Engine Components - Left Front (L3B)*<br>• *Engine Components - Left Rear (LM2)*<br>• *Engine Components - Right (LV3)*<br>• *Engine Components - Right Front (L82/L84/L87)* | • *Q2 A/C Compressor Clutch (L3B/L3V)*<br>• *Q2 A/C Compressor Clutch (L82)*<br>• *Q2 A/C Compressor Clutch (LM2/L84/L87)* |
| Q5 | Brake Pressure Modulator | — | In the engine compartment, left rear, part of K160 Brake System Control Module | — | — |
| Q6 | Camshaft Position Actuator Solenoid Valve | L82/L84/L87/LV3 | (L82/L84/L87) In the engine compartment, front center, mounted to timing chain cover, above crankshaft harmonic balancer | *Engine Components - Left Front (L82/L84/L87)* | *Q6 Camshaft Position Actuator Solenoid Valve (L82/L84/L87)* |
| Q6E | Camshaft Position Actuator Solenoid Valve - Exhaust | L3B | In the engine compartment, front center, in front of exhaust camshaft | *Engine Components - Left Front (L3B)* | *Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (L3B)* |
| Q6F | Camshaft Position Actuator Solenoid Valve - Intake | L3B | In the engine compartment, front center, in front of intake camshaft | *Engine Components - Left Front (L3B)* | *Q6F Camshaft Position Actuator Solenoid Valve - Intake (L3B)* |
| Q8 | Control Solenoid Valve Assembly | — | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | • *Q8 Control Solenoid Valve Assembly X1 (MYC)*<br>• *Q8 Control Solenoid Valve Assembly X2 (MYC)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| Q12 | Evaporative Emission Purge Solenoid Valve | L3B/L82/L84/<br>L87/LV3 | (L82/L84/L87/LV3) In the engine compartment, front center, mounted to intake manifold, to the left of Q38 Throttle Body | - *Engine Components - Left (LV3)*<br>- *Engine Components - Right Front (L82/L84/L87)* | *Q12 Evaporative Emission Purge Solenoid Valve (-LM2)* |
| Q13 | Evaporative Emission Vent Solenoid Valve | — | On the underbody, at the top left side of the fuel tank | — | *Q13 Evaporative Emission Vent Solenoid Valve (-LM2)* |
| Q14A | Exhaust Gas Recirculation Valve 1 | LM2 | In the engine compartment, right rear, mounted to the exhaust, near the top right side of the engine | *Engine Components - Right Rear (LM2)* | *Q14A Exhaust Gas Recirculation Valve 1 (LM2)* |
| Q14B | Exhaust Gas Recirculation Valve 2 | LM2 | In the engine compartment, right rear, mounted to the exhaust, near the lower right side of the transmission bellhousing | *Engine Components - Right Rear (LM2)* | *Q14B Exhaust Gas Recirculation Valve 2 (LM2)* |
| Q17A | Fuel Injector 1 | — | - (L3B) In the engine compartment, left side of engine, mounted to cylinder head below intake manifold, near cylinder 1<br>- (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 1 intake port on the cylinder head<br>- (LM2) In the engine compartment, center, mounted to valve cover above cylinder 1 | - *Engine Components - Left Rear (L3B)*<br>- *Engine Components - Top (L82/L84/L87)*<br>- *Engine Components - Top (LM2)*<br>- *Engine Components - Top (LV3)* | - *Q17A Fuel Injector 1 (L3B)*<br>- *Q17A Fuel Injector 1 (L82/L84/L87/LV3)*<br>- *Q17A Fuel Injector 1 (LM2)* |
| Q17B | Fuel Injector 2 | — | - (L3B) In the engine compartment, left side of engine, mounted to cylinder head below intake manifold, near cylinder 2<br>- (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 2 intake port on the cylinder head<br>- (LM2) In the engine compartment, center, mounted to valve cover above cylinder 2 | - *Engine Components - Left Rear (L3B)*<br>- *Engine Components - Top (L82/L84/L87)*<br>- *Engine Components - Top (LM2)*<br>- *Engine Components - Top (LV3)* | - *Q17B Fuel Injector 2 (L3B)*<br>- *Q17B Fuel Injector 2 (L82/L84/L87/LV3)*<br>- *Q17B Fuel Injector 2 (LM2)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| Q17C | Fuel Injector 3 | — | • (L3B) In the engine compartment, left side of engine, mounted to cylinder head below intake manifold, near cylinder 3<br>• (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 3 intake port on the cylinder head<br>• (LM2) In the engine compartment, center, mounted to valve cover above cylinder 3 | • *Engine Components - Left Rear (L3B)*<br>• *Engine Components - Top (L82/L84/L87)*<br>• *Engine Components - Top (LM2)*<br>• *Engine Components - Top (LV3)* | • *Q17C Fuel Injector 3 (L3B)*<br>• *Q17C Fuel Injector 3 (L82/L84/L87/LV3)*<br>• *Q17C Fuel Injector 3 (LM2)* |
| Q17D | Fuel Injector 4 | — | • (L3B) In the engine compartment, left side of engine, mounted to cylinder head below intake manifold, near cylinder 4<br>• (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 4 intake port on the cylinder head<br>• (LM2) In the engine compartment, center, mounted to valve cover above cylinder 4 | • *Engine Components - Left Rear (L3B)*<br>• *Engine Components - Top (L82/L84/L87)*<br>• *Engine Components - Top (LM2)*<br>• *Engine Components - Top (LV3)* | • *Q17D Fuel Injector 4 (L3B)*<br>• *Q17D Fuel Injector 4 (L82/L84/L87/LV3)*<br>• *Q17D Fuel Injector 4 (LM2)* |
| Q17E | Fuel Injector 5 | L82/L84/L87/LM2/LV3 | • (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 5 intake port on the cylinder head<br>• (LM2) In the engine compartment, center, mounted to valve cover above cylinder 5 | • *Engine Components - Top (L82/L84/L87)*<br>• *Engine Components - Top (LM2)*<br>• *Engine Components - Top (LV3)* | • *Q17E Fuel Injector 5 (L82/L84/L87/LV3)*<br>• *Q17E Fuel Injector 5 (LM2)* |
| Q17F | Fuel Injector 6 | L82/L84/L87/LM2/LV3 | • (L82/L84/L87/LV3) In the engine compartment, underneath intake manifold, next to cylinder 6 intake port on the cylinder head<br>• (LM2) In the engine compartment, center, mounted to valve cover above cylinder 6 | • *Engine Components - Top (L82/L84/L87)*<br>• *Engine Components - Top (LM2)*<br>• *Engine Components - Top (LV3)* | • *Q17F Fuel Injector 6 (L82/L84/L87/LV3)*<br>• *Q17F Fuel Injector 6 (LM2)* |
| Q17G | Fuel Injector 7 | L82/L84/L87 | • In the engine compartment, underneath intake manifold, next to cylinder 7 intake port on the cylinder head | *Engine Components - Top (L82/L84/L87)* | *Q17G Fuel Injector 7 (L82/L84/L87)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| Q17H | Fuel Injector 8 | L82/L84/L87 | • In the engine compartment, underneath intake manifold, next to cylinder 8 intake port on the cylinder head | *Engine Components - Top (L82/L84/L87)* | *Q17H Fuel Injector 8 (L82/L84/L87)* |
| Q18A | Fuel Pressure Regulator 1 | LM2 | In the engine compartment, left rear side of engine, below Q18C Fuel Pressure Regulator 3 | *Engine Components - Left Rear (LM2)* | *Q18A Fuel Pressure Regulator 1 (LM2)* |
| Q18B | Fuel Pressure Regulator 2 | LM2 | In the engine compartment, left side of engine, mounted to the left rear side of the valve cover | *Engine Components - Left Rear (LM2)* | *Q18B Fuel Pressure Regulator 2 (LM2)* |
| Q18C | Fuel Pressure Regulator 3 | LM2 | In the engine compartment, left rear side of engine, above Q18A Fuel Pressure Regulator 1 | *Engine Components - Left Rear (LM2)* | *Q18C Fuel Pressure Regulator 3 (LM2)* |
| Q22 | Intake Manifold Tuning Solenoid Valve | LM2 | In the engine compartment, front center, attached to the front of the intake manifold | — | *Q22 Intake Manifold Tuning Solenoid Valve (LM2)* |
| Q27A | Pressure Control Solenoid Valve 1 | MYC | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | — |
| Q27B | Pressure Control Solenoid Valve 2 | MYC | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | — |
| Q27C | Pressure Control Solenoid Valve 3 | MYC | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | — |
| Q27D | Pressure Control Solenoid Valve 4 | MYC | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | — |
| Q27E | Pressure Control Solenoid Valve 5 | MYC | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | — |
| Q32A | Shift Solenoid Valve 1 | MYC | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | — |
| Q32B | Shift Solenoid Valve 2 | MYC | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | — |
| Q37LF | Shock Absorber Actuator - Left Front | Z45 | Under the vehicle, left front, part of the left front shock absorber | *Brake and Suspension Components* | *Q37LF Shock Absorber Actuator - Left Front (Z45)* |
| Q37LR | Shock Absorber Actuator - Left Rear | Z45 | Under the vehicle, left rear, part of the left rear shock absorber | *Brake and Suspension Components* | *Q37LR Shock Absorber Actuator - Left Rear (Z45)* |
| Q37RF | Shock Absorber Actuator - Right Front | Z45 | Under the vehicle, right front, part of the right front shock absorber | *Brake and Suspension Components* | *Q37RF Shock Absorber Actuator - Right Front (Z45)* |
| Q37RR | Shock Absorber Actuator - Right Rear | Z45 | Under the vehicle, right rear, part of the right rear shock absorber | *Brake and Suspension Components* | *Q37RR Shock Absorber Actuator - Right Rear (Z45)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| Q38 | Throttle Body | — | • (L3B/L82/L84/L87) In the engine compartment, at the front of the engine, mounted to the intake manifold inlet<br>• (LM2) In the engine compartment, left front, to the left of the valve cover | • *Engine Components - Left Front (L3B)*<br>• *Engine Components - Left Rear (LM2)*<br>• *Engine Components - Right (LV3)*<br>• *Engine Components - Right Front (L82/L84/L87)*<br>• *Engine Components - Right Rear (LM2)* | *Q38 Throttle Body* |
| Q39A | Torque Converter Clutch Pressure Control Solenoid Valve | — | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | — |
| Q40 | Turbocharger Bypass Solenoid Valve | L3B | In the engine compartment, right side, mounted to the turbocharger compressor, beneath turbocharger compressor inlet | *Engine Components - Right Front (L3B)* | *Q40 Turbocharger Bypass Solenoid Valve (L3B)* |
| Q42 | Turbocharger Wastegate Solenoid Valve | L3B | In the engine compartment, right side, mounted to the top of the turobcharger compressor | *Engine Components - Right Front (L3B)* | — |
| Q43 | Valve Lifter Oil Manifold Assembly | LV3 | In the engine compartment, front center, mounted in engine valley, below Q38 Throttle Body | *Engine Components - Left (LV3)* | *Q43 Valve Lifter Oil Manifold Assembly (LV3)* |
| Q44 | Engine Oil Pressure Control Solenoid Valve | — | In the engine compartment, at the front of the engine, behind the front cover | — | • *Q44 Engine Oil Pressure Control Solenoid Valve (L3B)*<br>• *Q44 Engine Oil Pressure Control Solenoid Valve (L82/L84/L87/LV3)*<br>• *Q44 Engine Oil Pressure Control Solenoid Valve (LM2)* |
| Q46 | A/C Compressor Solenoid Valve | — | In the engine compartment, left front, part of G1 A/C Compressor | • *Engine Components - Left Front (L3B)*<br>• *Engine Components - Left Rear (LM2)*<br>• *Engine Components - Right (LV3)* | • *Q46 A/C Compressor Solenoid Valve (L3B/LV3)*<br>• *Q46 A/C Compressor Solenoid Valve (L82)*<br>• *Q46 A/C Compressor Solenoid Valve (LM2/L84/L87)* |
| Q61 | Reductant Injector | LM2 | In the engine compartment, right front, mounted to the exhaust, in front of diesel particulate filter | *Engine Components - Right Rear (LM2)* | *Q61 Reductant Injector (LM2)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| Q74 | Engine Coolant Bypass Valve | L3B/LM2 | In the engine compartment, left rear, attached to the bottom rear of the Integrated Exhaust Manfiold | • *Engine Components - Left Front (L3B)*<br>• *Engine Components - Left Rear (LM2)* | • *Q74 Engine Coolant Bypass Valve (L3B)*<br>• *Q74 Engine Coolant Bypass Valve (LM2)* |
| Q77A | Transmission Control Solenoid Valve 1 | MQB/MQE | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | • *Q77A Transmission Control Solenoid Valve 1 (MQB)*<br>• *Q77A Transmission Control Solenoid Valve 1 (MQE)* |
| Q77B | Transmission Control Solenoid Valve 2 | MQB/MQE | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | • *Q77B Transmission Control Solenoid Valve 2 (MQB)*<br>• *Q77B Transmission Control Solenoid Valve 2 (MQE)* |
| Q77C | Transmission Control Solenoid Valve 3 | MQB/MQE | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | • *Q77C Transmission Control Solenoid Valve 3 (MQB)*<br>• *Q77C Transmission Control Solenoid Valve 3 (MQE)* |
| Q77D | Transmission Control Solenoid Valve 4 | MQB/MQE | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | • *Q77D Transmission Control Solenoid Valve 4 (MQB)*<br>• *Q77D Transmission Control Solenoid Valve 4 (MQE)* |
| Q77E | Transmission Control Solenoid Valve 5 | MQB/MQE | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | • *Q77E Transmission Control Solenoid Valve 5 (MQB)*<br>• *Q77E Transmission Control Solenoid Valve 5 (MQE)* |
| Q77F | Transmission Control Solenoid Valve 6 | MQB/MQE | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | • *Q77F Transmission Control Solenoid Valve 6 (MQB)*<br>• *Q77F Transmission Control Solenoid Valve 6 (MQE)* |
| Q77G | Transmission Control Solenoid Valve 7 | MQB/MQE | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | • *Q77G Transmission Control Solenoid Valve 7 (MQB)*<br>• *Q77G Transmission Control Solenoid Valve 7 (MQE)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| Q77H | Transmission Control Solenoid Valve 8 | MQB/MQE | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | • *Q77H Transmission Control Solenoid Valve 8 (MQB)*<br>• *Q77H Transmission Control Solenoid Valve 8 (MQE)* |
| Q77J | Transmission Control Solenoid Valve 9 | MQE | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | • *Q77J Transmission Control Solenoid Valve 9 (MQB)*<br>• *Q77J Transmission Control Solenoid Valve 9 (MQE)* |
| Q80L | Engine Mount Solenoid Valve - Left | L3B/LM2 | (L3B) In the engine compartment, front center, mounted to left side of the upper oil pan | *Engine Components - Left Front (L3B)* | • *Q80L Engine Mount Solenoid Valve - Left (L3B)*<br>• *Q80L Engine Mount Solenoid Valve - Left (LM2)* |
| Q80R | Engine Mount Solenoid Valve - Right | L3B/LM2 | (L3B) In the engine compartment, front center, mounted to right side of the upper oil pan | *Engine Components - Right Rear (L3B)* | • *Q80R Engine Mount Solenoid Valve - Right (L3B)*<br>• *Q80R Engine Mount Solenoid Valve - Right (LM2)* |
| Q83AA | Valve Lifter Oil Solenoid Valve - Cylinder 1 | L82/L84/L87 | In the engine compartment, beneath cylinder head, next to cylinder 1 | — | *Q83AA Valve Lifter Oil Solenoid Valve - Cylinder 1 (L82/L84/L87)* |
| Q83AB | Valve Lifter Oil Solenoid Valve - Cylinder 2 | L82/L84/L87 | In the engine compartment, beneath cylinder head, next to cylinder 2 | — | *Q83AB Valve Lifter Oil Solenoid Valve - Cylinder 2 (L84/L87)* |
| Q83AC | Valve Lifter Oil Solenoid Valve - Cylinder 3 | L82/L84/L87 | In the engine compartment, beneath cylinder head, next to cylinder 3 | — | *Q83AC Valve Lifter Oil Solenoid Valve - Cylinder 3 (L84/L87)* |
| Q83AD | Valve Lifter Oil Solenoid Valve - Cylinder 4 | L82/L84/L87 | In the engine compartment, beneath cylinder head, next to cylinder 4 | — | *Q83AD Valve Lifter Oil Solenoid Valve - Cylinder 4 (L82/L84/L87)* |
| Q83AE | Valve Lifter Oil Solenoid Valve - Cylinder 5 | L82/L84/L87 | In the engine compartment, beneath cylinder head, next to cylinder 5 | — | *Q83AE Valve Lifter Oil Solenoid Valve - Cylinder 5 (L84/L87)* |
| Q83AF | Valve Lifter Oil Solenoid Valve - Cylinder 6 | L82/L84/L87 | In the engine compartment, beneath cylinder head, next to cylinder 6 | — | *Q83AF Valve Lifter Oil Solenoid Valve - Cylinder 6 (L82/L84/L87)* |
| Q83AG | Valve Lifter Oil Solenoid Valve - Cylinder 7 | L82/L84/L87 | In the engine compartment, beneath cylinder head, next to cylinder 7 | — | *Q83AG Valve Lifter Oil Solenoid Valve - Cylinder 7 (L82/L84/L87)* |
| Q83AH | Valve Lifter Oil Solenoid Valve - Cylinder 8 | L82/L84/L87 | In the engine compartment, beneath cylinder head, next to cylinder 8 | — | *Q83AH Valve Lifter Oil Solenoid Valve - Cylinder 8 (L84/L87)* |
| Q97 | Engine Coolant Flow Control Valve | L3B | In the engine compartment, left, attached to the front of the Integrated Exhaust Manifold | *Engine Components - Left Front (L3B)* | *Q97 Engine Coolant Flow Control Valve (L3B)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| Q97B | Engine Coolant Flow Control Valve - Block | LM2 | In the engine compartment, left front, attached the front of the Integrated Exhaust Manifold, at the top | *Engine Components - Left Rear (LM2)* | *Q97B Engine Coolant Flow Control Valve - Block (LM2)* |
| Q97M | Engine Coolant Flow Control Valve - Main | LM2 | In the engine compartment, left front, attached to the front of the Integrated Exhaust Manifold, behind the G13 Generator | *Engine Components - Left Rear (LM2)* | *Q97M Engine Coolant Flow Control Valve - Main (LM2)* |
| R6A | Terminating Resistor - High Speed Bus | — | Under the vehicle, near the left frame rail, above the spare tire, taped in the chassis harness | — | *R6A Terminating Resistor - High Speed Bus (IOS/IOT)* |
| R6E | Terminating Resistor - High Speed Extension Bus 1 | UEU/UHX | In the passenger compartment, right front, above headliner, near A9B Outside Rearview Mirror - Passenger | *Headliner Components* | *R6E Terminating Resistor - High Speed Extension Bus 1 (UEU/UHX)* |
| R6F | Terminating Resistor - High Speed Extension Bus 2 | — | In the passenger compartment, in the top of the right side of the instrument panel | — | *R6F Terminating Resistor - High Speed Extension Bus 2 (IOS/IOT)* |
| S2 | Transmission Manual Shift Switch | — | In the passenger compartment, part of the transmission shift lever | *Steering Column Components* | *S2 Transmission Manual Shift Switch* |
| S3 | Transmission Shift Lever | — | In the passenger compartment, mounted to the steering column | — | *S3 Transmission Shift Lever* |
| S13D | Door Lock Switch - Driver | — | In the passenger compartment, in the driver door handle trim panel | *Driver Door Trim Components* | *S13D Door Lock Switch - Driver* |
| S13P | Door Lock Switch - Passenger | — | In the passenger compartment, in the passenger door handle trim panel | *Passenger Door Trim Components* | *S13P Door Lock Switch - Passenger (AU3)* |
| S27 | Head-Up Display Switch | UV6 | In the passenger compartment, left front, left of the steering column, in the instrument panel | *Instrument Panel - Front* | *S27 Head-Up Display Switch (UV6)* |
| S30 | Headlamp Switch | — | In the passenger compartment, left of the steering column, in the instrument panel | *Instrument Panel - Front* | *S30 Headlamp Switch* |
| S32R | Seat Heating Control Switch - Rear | KA6 | In the passenger compartment, center, on the rear of the floor console | *Floor Console Components* | *S32R Seat Heating Switch - Rear (D07 +KA6)* |
| S33 | Horn Switch | — | In the passenger compartment, in the center of the steering wheel, behind the driver side air bag | — | *S33 Horn Switch* |
| S38 | Ignition Mode Switch | BTM | In the passneger compartment, right of the steering column, in the instrument panel | *Instrument Panel - Front* | *S38 Ignition Mode Switch (BTM)* |
| S39 | Ignition Switch | -BTM | In the passenger compartment, behind the steering wheel, on the right side of the steering column | *Steering Column Components* | *S39 Ignition Switch (-BTM)* |
| S47D | Seat Memory Switch - Driver | — | In the passenger compartment, on the driver door panel above the driver door switch assembly | *Driver Door Trim Components* | *S47D Seat Memory Switch - Driver (A45)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| S51 | Telematics Button Assembly | UE1 | In the passenger compartment, part of the inside rearview mirror | — | — |
| S52 | Outside Rearview Mirror Switch | — | In the passenger compartment, on the driver door trim panel | — | — |
| S64D | Seat Adjuster Switch - Driver | — | In the passenger compartment, mounted to the outboard side of the driver seat cushion | *Driver Seat Components* | *S64D Seat Adjuster Switch - Driver* |
| S64P | Seat Adjuster Switch - Passenger | — | In the passenger compartment, mounted to the outboard side of the passenger seat cushion | *Passenger Seat Components* | *S64P Seat Adjuster Switch - Passenger* |
| S65D | Seat Lumbar Support Switch - Driver | A2X | In the passenger compartment, mounted to the outboard side of the driver seat cushion | *Driver Seat Components* | *S65D Seat Lumbar Support Switch - Driver (A2X-A45)* |
| S65P | Seat Lumbar Support Switch - Passenger | A7K | In the passenger compartment, mounted to the outboard side of the passenger seat cushion | *Passenger Seat Components* | *S65P Seat Lumbar Support Switch - Passenger (A7K)* |
| S70E | Steering Wheel Controls Switch - Radio Presets | — | In the passenger compartment, on the left rear side of the steering wheel | — | *S70E Steering Wheel Controls Switch - Radio Presets (UK3)* |
| S70F | Steering Wheel Controls Switch - Radio Volume | — | In the passenger compartment, on the right rear side of the steering wheel | — | *S70F Steering Wheel Controls Switch - Radio Volume (UK3)* |
| S70L | Steering Wheel Controls Switch - Left | — | In the passenger compartment, on the left side of the steering wheel | — | *S70L Steering Wheel Controls Switch - Left* |
| S70R | Steering Wheel Controls Switch - Right | — | In the passenger compartment, on the right side of the steering wheel | — | *S70R Steering Wheel Controls Switch - Right* |
| S76 | Trailer Brake Control Switch | — | In the passenger compartment, center of the instrument panel, below S48C Multifunction Switch 1 - Instrument Panel | *Instrument Panel - Front* | *S76 Trailer Brake Control Switch (JL1)* |
| S78 | Turn Signal/Multifunction Switch | — | In the passenger compartment, on the left side of the steering column | *Steering Column Components* | *S78 Turn Signal/Multifunction Switch* |
| S79D | Window Switch - Driver | — | In the passenger compartment, behind the driver door trim panel, center of the door | — | — |
| S79LR | Window Switch - Left Rear | — | In the passenger compartment, at the center of the left rear door, on the door trim panel | • *Rear Door Trim Components (Extended Cab/Crew Cab)*<br>• *Right Rear Door Components (Extended Cab/Crew Cab)* | *S79LR Window Switch - Left Rear (Extended Cab/Crew Cab)* |
| S79P | Window Switch - Passenger | — | In the passenger compartment, on the passenger door trim panel, center of the door | *Passenger Door Trim Components* | • *S79P Window Switch - Passenger (AED)*<br>• *S79P Window Switch - Passenger (AEF)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| S79RR | Window Switch - Right Rear | — | In the passenger compartment, on the right rear door trim panel, center of the door | *Rear Door Trim Components (Extended Cab/Crew Cab)* | *S79RR Window Switch - Right Rear (Extended Cab/Crew Cab)* |
| S86 | Vehicle Stability Control Switch | — | In the passenger compartment, front center, attached to instrument panel, between S171L Instrument Panel Center Accessory Function Switch - Left and S171R Instrument Panel Center Accessory Function Switch - Right | *Instrument Panel - Front* | *S86 Vehicle Stability Control Switch* |
| S126 | Drive Mode Select Switch | URC | In the passenger compartment, left front, left side of the instrument panel, above S30 Headlamp Switch | *Instrument Panel - Front* | *S126 Drive Mode Select Switch (URC)* |
| S146 | Window/Outside Rearview Mirror Switch - Driver | — | In the passenger compartment, left front, attached to driver door trim | *Driver Door Trim Components* | *S146 Window/Outside Rearview Mirror Switch - Driver* |
| S148L | Assist Step Kick Switch - Left | BRS | Under the vehicle, along the left frame rail, under the driver door part of the power assist step | — | *S148L Assist Step Kick Switch - Left (BRS)* |
| S148R | Assist Step Kick Switch - Right | BRS | Under the vehicle, along the right frame rail, under the passenger door part of the power assist step | — | *S148R Assist Step Kick Switch - Right (BRS)* |
| S157 | Pickup Box Endgate Unlatch Switch | QT5 | Outside of the vehicle, at the rear of the vehicle, on the endgate | *Endgate Components (QK2)* | *S157 Pickup Box Endgate Unlatch Switch* |
| S159E | Pickup Box Endgate Control Switch - Exterior | QT6/QK2 | Outside of the vehicle, at the rear of the vehicle, on the endgate | • *Endgate Components (QK2)*<br>• *Endgate Components (QT6)* | • *S159E Pickup Box Endgate Control Switch - Exterior (QK1)*<br>• *S159E Pickup Box Endgate Control Switch - Exterior (QK2)* |
| S171L | Instrument Panel Center Accessory Function Switch - Left | — | In the passenger compartment, mounted to the instrument panel, beneath A26 HVAC Controls, left switch bank | *Instrument Panel - Front* | *S171L Instrument Panel Center Accessory Function Switch - Left* |
| S171R | Instrument Panel Center Accessory Function Switch - Right | — | In the passenger compartment, mounted to the instrument panel, beneath A26 HVAC Controls, right switch bank | *Instrument Panel - Front* | *S171R Instrument Panel Center Accessory Function Switch - Right* |
| S172 | Auxiliary Multifunction Switch | 9L7 | In the passenger compartment, mounted to the instrument panel | — | *S172 Auxiliary Multifunction Switch (9L7)* |
| T1 | Accessory DC/AC Power Inverter Module | KI4/KI5 | In the passenger compartment, rear center, mounted ot the rear wall | • *Passenger Compartment - Left Rear (Extended Cab/Crew Cab)*<br>• *Passenger Compartment - Left Rear (Regular Cab)* | • *T1 Accessory DC/AC Power Inverter Module X1 (KI4/KI5)*<br>• *T1 Accessory DC/AC Power Inverter Module X2 (KI4/KI5)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| T2 | Antenna | — | In the passenger compartment, on the steering column side, internal to the Immobilizer Control Module | — | — |
| T3 | Audio Amplifier | UQA | In the rear passenger compartment, mounted behind the rear seat, below the rear window | *Passenger Compartment - Right Rear (Extended Cab/Crew Cab)* | • *T3 Audio Amplifier X1 (UQA)*<br>• *T3 Audio Amplifier X2 (UQA)*<br>• *T3 Audio Amplifier X3 (UQA)*<br>• *T3 Audio Amplifier X4 (UQA)* |
| T4G | Cellular Phone, Navigation, and Digital Radio Antenna | — | Outside the vehicle, at the front left of the roof | • *Front of Vehicle Components (Chevrolet)*<br>• *Front of Vehicle Components (GMC)* | • *T4G Cellular Phone, Navigation, and Digital Radio Antenna X1 (UE1)*<br>• *T4G Cellular Phone, Navigation, and Digital Radio Antenna X2 (U2K)* |
| T4M | Radio Antenna | — | Outside the vehicle, at the right rear of the hood | • *Front of Vehicle Components (Chevrolet)*<br>• *Front of Vehicle Components (GMC)* | *T4M Radio Antenna* |
| T4P | Navigation Antenna | (IOS/IOT)-UE1 | Outside of the vehicle | — | *T4P Navigation Antenna ((IOS/IOT)-UE1)* |
| T4S | Wireless Communication Antenna - Bluetooth | — | Outside the vehicle, at the rear of the right front fender | — | — |
| T8A | Ignition Coil 1 | L3B/L82/L84/L87/LV3 | In the engine compartment, at the top of the engine, above cylinder 1 | • *Engine Components - Top (L3B)*<br>• *Engine Components - Top (L82/L84/L87)*<br>• *Engine Components - Top (LV3)* | • *T8A Ignition Coil 1 (L3B)*<br>• *T8A Ignition Coil 1 (L82/L84/L87/LV3)* |
| T8B | Ignition Coil 2 | L3B/L82/L84/L87/LV3 | In the engine compartment, at the top of the engine, above cylinder 2 | • *Engine Components - Top (L3B)*<br>• *Engine Components - Top (L82/L84/L87)*<br>• *Engine Components - Top (LV3)* | • *T8B Ignition Coil 2 (L3B)*<br>• *T8B Ignition Coil 2 (L82/L84/L87/LV3)* |
| T8C | Ignition Coil 3 | L3B/L82/L84/L87/LV3 | In the engine compartment, at the top of the engine, above cylinder 3 | • *Engine Components - Top (L3B)*<br>• *Engine Components - Top (L82/L84/L87)*<br>• *Engine Components - Top (LV3)* | • *T8C Ignition Coil 3 (L3B)*<br>• *T8C Ignition Coil 3 (L82/L84/L87/LV3)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| T8D | Ignition Coil 4 | L3B/L82/L84/L87/LV3 | In the engine compartment, at the top of the engine, above cylinder 4 | • *Engine Components - Top (L3B)*<br>• *Engine Components - Top (L82/L84/L87)*<br>• *Engine Components - Top (LV3)* | • *T8D Ignition Coil 4 (L3B)*<br>• *T8D Ignition Coil 4 (L82/L84/L87/LV3)* |
| T8E | Ignition Coil 5 | L82/L84/L87/LV3 | In the engine compartment, at the top of the engine, above cylinder 5 | • *Engine Components - Top (L82/L84/L87)*<br>• *Engine Components - Top (LV3)* | *T8E Ignition Coil 5 (L82/L84/L87/LV3)* |
| T8F | Ignition Coil 6 | L82/L84/L87/LV3 | In the engine compartment, at the top of the engine, above cylinder 6 | • *Engine Components - Top (L82/L84/L87)*<br>• *Engine Components - Top (LV3)* | *T8F Ignition Coil 6 (L82/L84/L87/LV3)* |
| T8G | Ignition Coil 7 | L82/L84/L87 | In the engine compartment, at the top of the engine, above cylinder 7 | *Engine Components - Top (L82/L84/L87)* | *T8G Ignition Coil 7 (L82/L84/L87)* |
| T8H | Ignition Coil 8 | L82/L84/L87 | In the engine compartment, at the top of the engine, above cylinder 8 | *Engine Components - Top (L82/L84/L87)* | *T8H Ignition Coil 8 (L82/L84/L87)* |
| T10B | Keyless Entry Antenna - Instrument Panel Compartment | BTM | In the passenger compartment, front center, within instrument panel, in front of P17 Info Display Module | *Instrument Panel - Rear* | *T10B Keyless Entry Antenna - Instrument Panel Compartment (BTM)* |
| T10C | Keyless Entry Antenna - Left Front Door Handle | — | Outside of the vehicle, at the rear of the driver door, within A24D Door Handle Assembly - Driver Exterior | — | — |
| T10D | Keyless Entry Antenna - Right Front Door Handle | — | Outside of the vehicle, at the rear of the passenger door, within A24P Door Handle Assembly - Passenger Exterior | — | — |
| T10E | Keyless Entry Antenna - Rear Compartment | BTM | At the rear of the vehicle, in front of the center of the rear bumper | *Rear of Vehicle Components* | *T10E Keyless Entry Antenna - Rear Compartment (BTM)* |
| T10J | Keyless Entry Antenna - Center Console Front | — | In the passenger compartment, front center, beneath floor console or center seat. | — | *T10J Keyless Entry Antenna - Center Console Front (BTM +D07)* |
| T10V | Keyless Entry Antenna - Front Middle Seat | -D07 | In the passenger compartment, front center, beneath the front middle seat | — | *T10V Keyless Entry Antenna - Front Middle Seat (BTM-D07)* |
| T12 | Automatic Transmission Assembly | — | Under the vehicle, mounted to the rear of the engine | — | • *T12 Automatic Transmission Assembly X1 (MQB)*<br>• *T12 Automatic Transmission Assembly X2 (MQB)*<br>• *T12 Automatic Transmission Assembly X3 (MQB)* |
| T19 | Power Supply Transformer | KL9 | In the passenger compartment, right front, between the instrument panel and bulkhead | *Behind Instrument Panel - Right* | *T19 Power Supply Transformer (KL9)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| T22 | Mobile Device Wireless Charger Module | K4C | In the passenger compartment, forward of center, in the floor console bin lid. | *Floor Console Components* | *T22 Mobile Device Wireless Charger Module (K4C)* |
| W24 | Blunt Cut - Trailer Brakes Provision | Z82-JL1 | In the passenger compartment, under left side of the instrument panel | — | — |
| W25 | Blunt Cut - Configurable Provision | 9L7 | In the passenger compartment, under the instrument panel, left of the brake pedal | — | — |
| X50A | Fuse Block - Underhood | — | In the engine compartment, right front, in front of C1 Battery | *Engine Compartment Components* | *Electrical Center Identification Views on page 6-188* |
| X50B | Fuse Block - Underhood Auxiliary | LM2 | In the engine compartment | — | *Electrical Center Identification Views on page 6-188* |
| X50D | Fuse Block - Battery | — | In the engine compartment, right front, on top of C1 Battery | *Engine Compartment Components* | *Electrical Center Identification Views on page 6-188* |
| X51B | Fuse Block - Instrument Panel Auxiliary | 9L7 | In the passenger compartment | — | *Electrical Center Identification Views on page 6-188* |
| X51L | Fuse Block - Instrument Panel Left | — | In the passenger compartment, left side of the instrument panel, behind side trim panel | — | *Electrical Center Identification Views on page 6-188* |
| X51R | Fuse Block - Instrument Panel Right | — | In the passenger compartment, right side of the instrument panel, behind side trim panel | — | *Electrical Center Identification Views on page 6-188* |
| X54 | Fuse Block - Snow Plow | — | In the engine compartment | — | *Electrical Center Identification Views on page 6-188* |
| X55SP | Fuse Holder - Snow Plow | — | In the engine compartment | — | *Electrical Center Identification Views on page 6-188* |
| X80C | Accessory Power Receptacle - Cargo | KC9/KCA | Outside of the vehicle, right rear corner of the truck bed | — | *X80C Accessory Power Receptacle - Cargo (KC9/KCA)* |
| X80G | Accessory Power Receptacle - Instrument Panel | — | In the passenger compartment, front center, in the instrument panel, beneath A26 HVAC Controls | *Instrument Panel - Front* | *X80G Accessory Power Receptacle - Instrument Panel* |
| X80L | Accessory Power Receptacle - Center Console Rear | D07/AZ3 | In the passenger compartment, center, on the rear of the floor console | *Floor Console Components* | *X80L Accessory Power Receptacle - Center Console Rear (A50/D07)* |
| X80M | Accessory Power Receptacle - Rear Seat | — | In the passenger compartment, center, on the rear of the floor console | — | *X80M Accessory Power Receptacle - Rear Seat (KPA +(AE7/AZ3))* |
| X81 | Accessory Power Receptacle - 110V AC | KI4 | In the passenger compartment, front center, attached to instrument panel, right of X80G Accessory Power Receptacle - Instrument Panel | *Instrument Panel - Front* | • *X81 Accessory Power Receptacle - 110V AC X1 (KI4)*<br>• *X81 Accessory Power Receptacle - 110V AC X2 (KI4)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| X81B | Accessory Power Receptacle - 220V AC | KI5 | In the passenger compartment, front center, attached to instrument panel, right of X80G Accessory Power Receptacle - Instrument Panel | *Instrument Panel - Front* | • *X81B Accessory Power Receptacle - 220V AC X1 (KI5)*<br>• *X81B Accessory Power Receptacle - 220V AC X2 (KI5)* |
| X83 | Auxiliary Audio Input | — | In the passenger compartment, in the center console storage compartment | *Floor Console Components* | • *X83 Auxiliary Audio Input X1 ((IOS/IOT)+D07)*<br>• *X83 Auxiliary Audio Input X2 ((IOS/IOT)+D07)* |
| X84 | Data Link Connector | — | In the passenger compartment, at the bottom of the driver side of the instrument panel | *Instrument Panel - Front* | *X84 Data Link Connector* |
| X85 | Steering Wheel Air Bag Coil | — | In the passenger compartment, behind the steering wheel | *Steering Column Components* | • *X85 Steering Wheel Air Bag Coil X1*<br>• *X85 Steering Wheel Air Bag Coil X2* |
| X88 | Trailer Connector | — | On the vehicle exterior, at the rear of the vehicle, left of the license plate | *Rear of Vehicle Components* | • *X88 Trailer Connector X1 (Z82-U1D)*<br>• *X88 Trailer Connector X2 (UVI)* |
| X92 | USB Receptacle | — | In the passenger compartment, front center, in the instrument panel, beneath A26 HVAC Controls | *Instrument Panel - Front* | • *X92 USB Receptacle X1*<br>• *X92 USB Receptacle X2*<br>• *X92 USB Receptacle X3 (D07 +(IOS/IOT))* |
| X92B | USB Receptacle - Rear Seat | D07/AZ3 | In the passenger compartment, center, on the rear of the floor console | — | *X92B USB Receptacle - Rear Seat ((AE7/AZ3)+USS)* |
| X92C | USB Receptacle - Center Console Rear | D07/AZ3 | In the passenger compartment, center, on the rear of the floor console | *Floor Console Components* | *X92C USB Receptacle - Center Console Rear ((IOS/IOT) +(A50/D07))* |
| X100 | Front Fascia Harness to Body Harness | T3U/UD5 | In the engine compartment, near the center of the lower radiator support | *Front Bumper Harness Routing* | *X100 Front Fascia Harness to Body Harness (T3U/UD5)* |
| X109 | Chassis Harness to Body Harness | UVB | Under the vehicle, in right front wheel well, near frame rail | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | *X109 Chassis Harness to Body Harness (UVB)* |
| X110 | Body Harness to Left Headlamp Harness | — | In the engine compartment, at the rear of the left headlamp assembly | — | *X110 Body Harness to Left Headlamp Harness* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| X111 | Transfer Case Harness to Engine Harness | NP0/NQH | Under the vehicle, near the front axle | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Left Front (LM2)* | • *X111 Transfer Case Harness to Engine Harness ((NP0/NQH) +LM2)*<br>• *X111 Transfer Case Harness to Engine Harness ((NP0/NQH)-LM2)* |
| X115 | Engine Harness to Body Harness | — | In the front of the engine compartment, near the upper left of the radiator support | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Left Front (LM2)* | *X115 Engine Harness to Body Harness* |
| X120 | Body Harness to Right Headlamp Harness | — | In the engine compartment, at the rear of the right headlamp assembly | — | *X120 Body Harness to Right Headlamp Harness* |
| X127 | Grille Frontview Camera Harness to Body Harness | — | • (UV2) At the front of the vehicle<br>• (UVI) At the front of the vehicle | — | *X127 Grille Frontview Camera Harness to Body Harness (UV2)* |
| X132 | Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness | VTI/WMI | At the front of the vehicle, at center, behind upper grille at hood latch | • *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (LM2)* | *X132 Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)* |
| X133 | Active Grille Air Shutter 1 Actuator Jumper Harness to Active Grille Air Shutter 2 Actuator Jumper Harness | WMI | Under the vehicle, clipped to the steering gear | — | *X133 Active Grille Air Shutter 1 Actuator Jumper Harness to Active Grille Air Shutter 2 Actuator Jumper Harness (WMI)* |
| X136 | Chassis Harness to Electronic Suspension Strut Extension Harness | Z45 | In the engine compartment, left side, attached to the left frame rail, behind the left strut tower | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Electronic Suspension Strut Extension Harness Routing* | *X136 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)* |
| X137 | Chassis Harness to Electronic Suspension Strut Extension Harness | Z45 | In the engine compartment, right side, attached to the right frame rail, behind the right strut tower | *Electronic Suspension Strut Extension Harness Routing* | *X137 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| X138 | Body Harness to Chassis Harness | — | In the rear of the engine compartment, near the rear of the under hood fuse block | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | *X138 Body Harness to Chassis Harness* |
| X140 | Chassis Harness to Body Harness | — | In the engine compartment, left side | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | *X140 Chassis Harness to Body Harness* |
| X143 | DEF Jumper Harness to Chassis Harness | LM2 | At the right rear of the engine compartment, near the frame | — | *X143 DEF Jumper Harness to Chassis Harness (LM2)* |
| X153 | Engine Harness to Coolant Temperature Jumper Harness | LM2 | In the engine compartment, near coolant temperature sensor | — | *X153 Engine Harness to Coolant Temperature Jumper Harness (LM2)* |
| X154 | Engine Harness to Camshaft Position Sensor Jumper Harness | L82/L84/L87/ LV3 | In the engine compartment, near the fuel rail | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L82)* | • *X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/LV3)*<br>• *X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L84/L87)* |
| X155 | Engine Harness to Active Fuel Management Solenoid Jumper Harness | L82/L84/L87 | In the engine compartment, at the intake manifold | — | *X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L84/L87)* |
| X156 | Engine Harness to Active Fuel Management Solenoid Jumper Harness | L82/L84/L87 | In the engine compartment, at the intake manifold | *Engine Harness Routing - Left Front (L82)* | *X156 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L82/L84/L87)* |
| X157 | Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Harness | L82/L84/L87 | In the engine compartment, at the intake manifold | — | *X157 Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Harness (L82/L84/L87)* |
| X158 | Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness | L82/L84/L87/ LV3 | At the left front of the engine compartment | — | • *X158 Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness (L3B/LM2)*<br>• *X158 Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness (L87)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| X160 | Engine Harness to Fuel Rail Harness | L3B | In the engine compartment, rear of the engine near the top center | • *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (LM2)*<br>• *Engine Harness Routing - Right Rear (L82)*<br>• *Engine Harness Routing - Right Rear (L84/L87)*<br>• *Engine Harness Routing - Top (LV3)* | • *X160 Engine Harness to Bank 1 Fuel Rail Harness (L82/L84/L87)*<br>• *X160 Engine Harness to Bank 1 Fuel Rail Harness (LV3)*<br>• *X160 Engine Harness to Fuel Injector Harness (LM2)*<br>• *X160 Engine Harness to Fuel Rail Harness (L3B)* |
| X160 | Engine Harness to Bank 1 Fuel Rail Harness | L82/L84/L87/ LV3 | In the engine compartment, rear of the engine near the top center | • *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (LM2)*<br>• *Engine Harness Routing - Right Rear (L82)*<br>• *Engine Harness Routing - Right Rear (L84/L87)*<br>• *Engine Harness Routing - Top (LV3)* | • *X160 Engine Harness to Bank 1 Fuel Rail Harness (L82/L84/L87)*<br>• *X160 Engine Harness to Bank 1 Fuel Rail Harness (LV3)*<br>• *X160 Engine Harness to Fuel Injector Harness (LM2)*<br>• *X160 Engine Harness to Fuel Rail Harness (L3B)* |
| X160 | Engine Harness to Fuel Injector Harness | LM2 | In the engine compartment, rear of the engine near the top center | • *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (LM2)*<br>• *Engine Harness Routing - Right Rear (L82)*<br>• *Engine Harness Routing - Right Rear (L84/L87)*<br>• *Engine Harness Routing - Top (LV3)* | • *X160 Engine Harness to Bank 1 Fuel Rail Harness (L82/L84/L87)*<br>• *X160 Engine Harness to Bank 1 Fuel Rail Harness (LV3)*<br>• *X160 Engine Harness to Fuel Injector Harness (LM2)*<br>• *X160 Engine Harness to Fuel Rail Harness (L3B)* |
| X161 | Engine Harness to Bank 2 Fuel Rail Harness | L82/L84/L87/ LV3 | In the engine compartment, rear of the engine near the top right | • *Engine Harness Routing - Right Rear (L82)*<br>• *Engine Harness Routing - Right Rear (L84/L87)*<br>• *Engine Harness Routing - Top (LV3)* | • *X161 Engine Harness to Bank 2 Fuel Rail Harness (L82/L84/L87)*<br>• *X161 Engine Harness to Bank 2 Fuel Rail Harness (LV3)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| X171 | Engine Harness to Chassis Harness | — | On the engine, near the even ignition coils | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)*<br>• *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Left Front (LM2)*<br>• *Engine Harness Routing - Left Front (LM2)* | *X171 Engine Harness to Chassis Harness* |
| X172 | Engine Harness to Glow Plug Jumper Harness | LM2 | In the engine compartment, left front, above the G13 Generator | — | *X172 Engine Harness to Glow Plug Jumper Harness (LM2)* |
| X175 | Engine Harness to Transmission Harness | MQE | Under the vehicle, at the rear of the T12 Automatic Transmission Assembly | *Engine Harness Routing - Right Rear (L3B)* | *X175 Engine Harness to Transmission Harness (MQE)* |
| X176 | Transmission Case Harness to Transmission Control Harness | — | Under the vehicle, inside the T12 Automatic Transmission Assembly | — | • *X176 Transmission Case Harness to Transmission Control Harness (MQB)*<br>• *X176 Transmission Case Harness to Transmission Control Harness (MQE)* |
| X177 | Transmission Case Harness to Speed Sensor Assembly Harness | MQB | In the engine compartment, at the right front of the engine compartment, near the mass airflow sensor | — | • *X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQB)*<br>• *X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQE)* |
| X182 | Chassis Harness to Power Steering Harness | Z45 | In the engine compartment, near cylinder 2 fuel injector | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | *X182 Chassis Harness to Power Steering Harness (Z45)* |
| X183 | Power Steering Harness to Power Steering Jumper Harness | — | In the engine compartment, near cylinder 3 fuel injector | — | *X183 Power Steering Harness to Power Steering Jumper Harness* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| X205 | Instrument Panel Harness to Passenger Instrument Panel Air Bag Jumper Harness | — | In the passenger compartment, behind the right side of the instrument panel near the center | — | *X205 Instrument Panel Harness to Passenger Instrument Panel Air Bag Jumper Harness* |
| X209 | Instrument Panel Harness to Body Harness | UVB | In the passenger compartment, right front, at the bottom of the A-pillar, behind passenger kick panel | • *Body Harness Routing - Right Front (Crew Cab)*<br>• *Body Harness Routing - Right Front (Extended Cab)*<br>• *Body Harness Routing - Right Front (Regular Cab)*<br>• *Instrument Panel Harness Routing* | *X209 Instrument Panel Harness to Body Harness (UVB)* |
| X211 | Instrument Panel Harness to Body Harness | — | In the passenger compartment, at the top right of the instrument panel, under the defroster duct trim | • *Body Harness Routing - Right Front (Extended Cab)*<br>• *Instrument Panel Harness Routing* | *X211 Instrument Panel Harness to Body Harness* |
| X225 | Instrument Panel Harness to Body Harness | — | In the passenger compartment, behind the lower left side of the instrument panel | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Extended Cab)*<br>• *Body Harness Routing - Left Front (Regular Cab)*<br>• *Instrument Panel Harness Routing* | *X225 Instrument Panel Harness to Body Harness* |
| X241 | Body Harness to Power Inverter Module Jumper Harness | KI4/KI5 | In the passenger compartment, behind the middle of the instrument panel | • *Body Harness Routing - Left Rear (Extended Cab/Crew Cab)*<br>• *Body Harness Routing - Left Rear (Regular Cab)* | *X241 Body Harness to Power Inverter Module Jumper Harness (KI5)* |
| X250 | Auxiliary Heater Jumper Harness to Body Harness | C32 | In the passenger compartment, right front, at the bottom of the A-pillar, behind passenger kick panel | • *Body Harness Routing - Right Front (Crew Cab)*<br>• *Body Harness Routing - Right Front (Extended Cab)* | *X250 Auxiliary Heater Jumper Harness to Body Harness (C32)* |
| X255 | USB Receptacle Jumper Harness to Floor Console Harness | D07+(IOS/IOT) | In the passenger compartment, center, underneath the front of the floor console | *Floor Console Harness Routing* | *X255 USB Receptacle Jumper Harness to Floor Console Harness ((IOS/IOT)+D07)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| X256 | Headliner Harness to Instrument Panel Harness | — | In the passenger compartment, right front, at the bottom of the A-pillar, behind passenger kick panel | • *Headliner Harness Routing*<br>• *Headliner Harness Routing (Extended Cab)*<br>• *Instrument Panel Harness Routing* | *X256 Headliner Harness to Instrument Panel Harness* |
| X260 | Auxiliary Instrument Panel Harness to Instrument Panel Harness | 9L7 | In the passenger compartment, left front, within instrument panel, above X84 Data Link Connector | *Instrument Panel Harness Routing* | *X260 Auxiliary Instrument Panel Harness to Instrument Panel Harness* |
| X275 | Instrument Panel Harness to Body Harness | — | In the passenger compartment, behind the lower right side of the instrument panel | • *Body Harness Routing - Right Front (Crew Cab)*<br>• *Body Harness Routing - Right Front (Extended Cab)*<br>• *Body Harness Routing - Right Front (Regular Cab)*<br>• *Instrument Panel Harness Routing* | *X275 Instrument Panel Harness to Body Harness* |
| X310 | Driver Seat Harness to Body Harness | — | In the passenger compartment, under the passenger seat | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Extended Cab)*<br>• *Body Harness Routing - Left Front (Regular Cab)* | *X310 Driver Seat Harness to Body Harness* |
| X318 | Sunroof Jumper Harness to Headliner Harness | CF5 | In the passenger compartment, in the headliner, between near the A-pillar | *Headliner Harness Routing (Extended Cab)* | *X318 Sunroof Jumper Harness to Headliner Harness* |
| X320 | Passenger Seat Harness to Body Harness | — | In the passenger compartment, under the passenger seat | • *Body Harness Routing - Right Front (Crew Cab)*<br>• *Body Harness Routing - Right Front (Extended Cab)*<br>• *Body Harness Routing - Right Front (Regular Cab)* | *X320 Passenger Seat Harness to Body Harness* |
| X348 | Body Harness to Floor Console Harness | D07 | In the passenger compartment, center, underneath the rear of the floor console | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Right Front (Extended Cab)*<br>• *Body Harness Routing - Right Front (Regular Cab)*<br>• *Floor Console Harness Routing* | • *X348 Body Harness to Floor Console Harness (D07)*<br>• *X348 Body Harness to Front Center Seat Harness (AZ3)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| X350 | Chassis Harness to Fuel Tank Harness | — | Under the vehicle, at the top of the fuel tank, near the fuel pump and level sensor assembly | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | *X350 Chassis Harness to Fuel Tank Harness* |
| X370 | Body Harness to Rear Seat Harness | KA6 | In the passenger compartment, left rear, at the rear wall, behind the rear seat | • *Body Harness Routing - Left Rear (Extended Cab/Crew Cab)*<br>• *Rear Seat Harness Routing (Extended Cab/Crew Cab)* | *X370 Body Harness to Rear Seat Harness (KA6)* |
| X379 | Headliner Harness to Inside Rearview Mirror Jumper Harness | DRZ | In the passenger compartment, at the rear of the headliner | — | *X379 Headliner Harness to Inside Rearview Mirror Jumper Harness (DRZ)* |
| X380 | Center High Mounted Stop Lamp Jumper Harness to Headliner Harness | Extended Cab/ Crew Cab | In the passenger compartment, behind the left C-pillar, near the headliner | *Headliner Harness Routing (Extended Cab)* | *X380 Center High Mounted Stop Lamp Jumper Harness to Headliner Harness (Extended Cab/Crew Cab)* |
| X381 | Center High Mounted Stop Lamp Jumper Harness to Inside Rearview Mirror Jumper Harness | DRZ | In the passenger compartment, at the rear of the headliner | — | *X381 Center High Mounted Stop Lamp Jumper Harness to Inside Rearview Mirror Jumper Harness (DRZ)* |
| X408 | Left Assist Step Jumper Harness to Chassis Harness | BRS | Underneath the vehicle | — | *X408 Left Assist Step Jumper Harness to Chassis Harness (BRS)* |
| X410 | Tail Lamp - Left Harness to Chassis Harness | — | At the rear of the vehicle, left corner, underneath, on left frame rail | *Chassis Harness Routing (Extended Cab/Crew Cab)* | *X410 Tail Lamp - Left Harness to Chassis Harness* |
| X415 | Chassis Rear Extension Harness to Chassis Harness | — | Underneath the bed, attached to frame cross rail near the front of the truck bed | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)*<br>• *Rear Chassis Extension Harness Routing* | *X415 Chassis Rear Extension Harness to Chassis Harness* |
| X418 | Right Assist Step Jumper Harness to Chassis Harness | BRS | Underneath the vehicle, along the outside of the right frame rail, beneath left rear door | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Extended Cab/Crew Cab)* | *X418 Right Assist Step Jumper Harness to Chassis Harness (BRS)* |
| X420 | Tail Lamp - Right Harness to Chassis Harness | — | At the rear of the vehicle, right corner, underneath, on right frame rail | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | *X420 Tail Lamp - Right Harness to Chassis Harness* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| X427 | Body Harness to Chassis Harness | UVI | Under the vehicle, in right front wheel well, near frame rail | *Chassis Harness Routing (Extended Cab/Crew Cab)* | *X427 Body Harness to Chassis Harness (UVI)* |
| X428 | Chassis Harness to Body Harness | UV2/UVI | Under the rear of the vehicle, to the left of the spare tire | — | *X428 Chassis Harness to Body Harness (UV2/UVI)* |
| X436 | Chassis Harness to Rear Axle Harness | — | Underneath the bed, attached to frame cross rail near the front of the truck bed | *Chassis Harness Routing (Extended Cab/Crew Cab)* | — |
| X450 | Cargo Accessory Power Receptacle Jumper Harness to Chassis Harness | KC9/KCA | Underneath the rear of the vehicle, at the right rear corner | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | *X450 Cargo Accessory Power Receptacle Jumper Harness to Chassis Harness (KC9/KCA)* |
| X500 | Driver Door Harness to Body Harness | — | In the passenger compartment, behind the left side of the instrument panel | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Extended Cab)*<br>• *Body Harness Routing - Left Front (Regular Cab)*<br>• *Driver and Passenger Door Harnesses* | *X500 Driver Door Harness to Body Harness* |
| X505 | Driver Door Harness to Driver Door Trim Harness | — | In the driver door, behind the driver door panel | • *Driver and Passenger Door Harnesses*<br>• *Driver and Passenger Door Trim Harnessses* | *X505 Driver Door Harness to Driver Door Trim Harness* |
| X510 | Driver Door Harness to Outside Rearview Mirror - Driver Harness | — | In the driver door, behind the driver door panel, near the A-pillar | *Driver and Passenger Door Harnesses* | *X510 Driver Door Harness to Outside Rearview Mirror - Driver Harness* |
| X600 | Passenger Door Harness to Body Harness | — | In the passenger compartment, behind the right side of the instrument panel | • *Body Harness Routing - Right Front (Crew Cab)*<br>• *Body Harness Routing - Right Front (Extended Cab)*<br>• *Body Harness Routing - Right Front (Regular Cab)*<br>• *Driver and Passenger Door Harnesses* | *X600 Passenger Door Harness to Body Harness* |
| X605 | Passenger Door Harness to Passenger Door Trim Harness | — | In the passenger door, behind the passenger door panel | • *Driver and Passenger Door Harnesses*<br>• *Driver and Passenger Door Trim Harnessses* | *X605 Passenger Door Harness to Passenger Door Trim Harness* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| X610 | Passenger Door Harness to Passenger Outside Rearview Mirror Harness | — | In the passenger door, behind the passenger door panel, near the A-pillar | *Driver and Passenger Door Harnesses* | *X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness* |
| X700 | Left Rear Door Harness to Body Harness | Extended Cab/ Crew Cab | In the passenger compartment, behind the left B-pillar, near the middle | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Extended Cab)*<br>• *Left Rear and Right Rear Door Harnesses (Crew Cab)*<br>• *Left Rear and Right Rear Door Harnesses (Extended Cab)* | *X700 Left Rear Door Harness to Body Harness* |
| X800 | Right Rear Door Harness to Body Harness | Extended Cab/ Crew Cab | In the passenger compartment, behind the right B-pillar, near the middle | • *Body Harness Routing - Right Front (Crew Cab)*<br>• *Body Harness Routing - Right Front (Extended Cab)*<br>• *Left Rear and Right Rear Door Harnesses (Crew Cab)*<br>• *Left Rear and Right Rear Door Harnesses (Extended Cab)* | *X800 Right Rear Door Harness to Body Harness* |
| X901 | Rear Fascia Harness to Chassis Harness | — | On the vehicle underbody, behind rear bumper, near the left frame rail | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)*<br>• *Rear Bumper Harness Routing* | *X901 Rear Fascia Harness to Chassis Harness* |
| X904 | Chassis Harness to Rear Chassis Extension Harness | Z45 | Under the vehicle, rear center, above the rear differential | *Rear Chassis Extension Harness Routing* | • *X904 Chassis Harness to Rear Chassis Extension Harness (Z45)*<br>• *X904 Rear Chassis Extension Harness to Chassis Harness (-Z45)* |
| X904 | Rear Chassis Extension Harness to Chassis Harness | -Z45 | Under the vehicle, rear center, above the rear differential | *Rear Chassis Extension Harness Routing* | • *X904 Chassis Harness to Rear Chassis Extension Harness (Z45)*<br>• *X904 Rear Chassis Extension Harness to Chassis Harness (-Z45)* |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| X909 | Endgate Coax Harness to Chassis Coax Harness | UVB | Under the vehicle, near the left lower side of the endgate | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)*<br>• *Endgate Harness Routing (QK2)* | *X909 Endgate Harness to Chassis Harness (UVB)* |
| X926 | Endgate Harness to Chassis Harness | QK2/QT5 | Under the vehicle, near the left lower side of the endgate | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)*<br>• *Endgate Harness Routing (QK2)* | *X926 Endgate Harness to Chassis Harness (QK2/QT5)* |
| X929 | Endgate Harness to Chassis Harness | UV2/UVI | under the vehicle, in the endgate, near B87 Rearview Camera | — | *X929 Endgate Harness to Chassis Harness (UV2/UVI)* |
| G110 | Body Harness | — | In the engine compartment, left side, attached to body | *G110, G114, G120, and G128* | — |
| G114 | Engine Harness | — | In the engine compartment, left side, attached to body | *G110, G114, G120, and G128* | — |
| G115 | Engine Harness | — | • (L3B) In the engine compartment, right front, attached to right front side of engine block, in front of turbocharger<br>• (LM2) In the engine compartment, right rear, attached to the right rear side of the engine block, above the engine oil filter housing | • *G115 and G121 (L3B)*<br>• *G115, G117, and G118 (LM2)*<br>• *G117, G121, and G122 (LV3)* | — |
| G116 | Power Steering Harness | — | In the engine compartment, center | — | — |
| G117 | Engine Harness | — | • (L3B) In the engine compartment, rear center, attached to the back of the right side of the cylinder head<br>• (L82/L84/L87/LV3) In the engine compartment, attached to the left side of the engine block, below the exhaust manifold<br>• (LM2) In the engine compartment, right rear, attached to the right rear side of the engine block, above engine oil filter housing | • *G115, G117, and G118 (LM2)*<br>• *G117 (L3B)*<br>• *G117 (L82/L84/L87)* | — |
| G118 | Engine Harness | LM2 | In the engine compartment, left rear, attached to left rear side of engine block, near bellhousing | *G115, G117, and G118 (LM2)* | — |
| G120 | Body Harness | — | In the engine compartment, right side, right of C1 Battery | *G110, G114, G120, and G128* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| G121 | Engine Harness | — | • (L3B) In the engine compartment, right front, attached to right front side of engine block, in front of turbocharger<br>• (L82/L84/L87/LV3) In the engine compartment, left rear, attached to the rear of the left cylinder head | • *G115 and G121 (L3B)*<br>• *G117, G121, and G122 (LV3)*<br>• *G121 and G122 (L82/L84/L87)* | — |
| G122 | Engine Harness | — | (L82/L84/L87/LV3) In the engine compartment, right rear, attached to right rear cylinder head | • *G117, G121, and G122 (LV3)*<br>• *G121 and G122 (L82/L84/L87)* | — |
| G128 | Body Harness | — | In the engine compartment, right rear, attached to bulkhead, near grommet for body harness | *G110, G114, G120, and G128* | — |
| G130 | Negative Battery Cable Harness | — | In the engine compartment, right rear corner | — | — |
| G131 | Frame Ground Strap | — | Under the vehicle, right front wheel well, behind inner fender, rearward of upper control arm | *G131, G132, G133, and G134* | — |
| G132 | Engine Ground Strap | — | Under the vehicle, right front wheel well, behind inner fender, rearward of lower control arm | *G131, G132, G133, and G134* | — |
| G133 | Frame Ground Strap | — | Under the vehicle, right front wheel well, behind inner fender, rearward of upper control arm | *G131, G132, G133, and G134* | — |
| G134 | Engine Ground Strap | — | Under the vehicle, right front wheel well, behind inner fender, rearward of lower control arm | *G131, G132, G133, and G134* | — |
| G200 | Instrument Panel Harness | — | In the passenger compartment, left front, below A-pillar, behind driver side kick panel | *G200* | — |
| G215 | Electrical Auxiliary Heater Jumper Harness | — | In the passenger compartment, right front, within the instrument panel | — | — |
| G220 | Instrument Panel Harness | — | In the passenger compartment, right front, below A-pillar, behind passenger side kick panel | *G220* | — |
| G300 | Body Harness | — | In the passenger compartment, left side, at the bottom of the B-pillar | *G300 and G308* | — |
| G308 | Body Harness | — | In the passenger compartment, left side, beneath the driver seat | *G300 and G308* | — |
| G312 | Body Harness | — | In the passenger compartment, right side, beneath the passenger seat | *G312 and G320* | — |
| G320 | Body Harness | — | In the passenger compartment, right side, at the bottom of the B-pillar | *G312 and G320* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| G322 | Chassis Harness | — | Under the vehicle, right side, within chassis harness, near the front hanger for the right rear leaf spring | *G322, G400, G405, and G415* | — |
| G400 | Chassis Harness | — | Under the rear of the vehicle, in front of the tow hitch, mounted to the right side of the frame | *G322, G400, G405, and G415* | — |
| G405 | Chassis Harness | — | Under the rear of the vehicle, in front of the tow hitch, mounted to the center of the frame | *G322, G400, G405, and G415* | — |
| G415 | Chassis Harness | — | Under the rear of the vehicle, in front of the tow hitch, mounted to the left side of the frame | *G322, G400, G405, and G415* | — |
| G420 | Chassis Harness | — | At the rear of the vehicle, right side, in the rear bumper | — | — |
| J100 | Front Bumper Harness | UD5 | Front of vehicle, left of center, between breakout to B306B Parking Assist Sensor - Front Left Middle and breakout to B306C Parking Assist Sensor - Front Right Middle | *Front Bumper Harness Routing* | — |
| J101 | Front Bumper Harness | UD5 | Front of vehicle, center, between breakout to B306B Parking Assist Sensor - Front Left Middle and breakout to B306C Parking Assist Sensor - Front Right Middle | *Front Bumper Harness Routing* | — |
| J102 | Front Bumper Harness | T3U | Front of vehicle, right of center, between breakout to B306B Parking Assist Sensor - Front Left Middle and breakout to B306C Parking Assist Sensor - Front Right Middle | *Front Bumper Harness Routing* | — |
| J103 | Active Grille Air Shutter Jumper 1 Harness | — | At the front of the vehicle, behind grille, within Active Grille Air Shutter Jumper 1 Harness | — | — |
| J104 | Active Grille Air Shutter Jumper 2 Harness | — | At the front of the vehicle, behind grille, within Active Grille Air Shutter Jumper 2 Harness | — | — |
| J105 | Active Grille Air Shutter Jumper 1 Harness | — | At the front of the vehicle, behind grille, within Active Grille Air Shutter Jumper 1 Harness | — | — |
| J110 | Left Headlamp Assembly Harness | — | Outside of the vehicle, left front corner, within E13LA Headlamp Assembly - Left | — | — |
| J111 | Left Headlamp Harness | X88+Base | At the left front of vehicle, within E13LA Headlamp Assembly - Left | — | — |
| J112 | Left Headlamp Harness | (X88-Base)/ (Z88) | At the left front of vehicle, within E13LA Headlamp Assembly - Left | — | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J120 | Right Headlamp Assembly Harness | — | Outside of the vehicle, right front corner, within E13RA Headlamp Assembly - Right | — | — |
| J121 | Right Headlamp Harness | X88+Base | At the right front of vehicle, within E13RA Headlamp Assembly - Right | — | — |
| J122 | Right Headlamp Harness | (X88-Base)/ (Z88) | At the right front of vehicle, within E13RA Headlamp Assembly - Right | — | — |
| J130 | Body Harness | — | • In the engine compartment, left front, approximately 14 cm (5.5 in) from breakout to G24 Windshield Washer Pump and B118B Windshield Washer Fluid Level Switch<br>• | — | — |
| J131 | Body Harness | — | Outside of the vehicle, left front, under air inlet grille panel, in breakout to M75 Windshield Wiper Motor | — | — |
| J132 | Body Harness | — | • (Regular Cab) In the engine compartment, left rear, approximately 23 cm (9.1 in) from breakout to M75 Windhsield Wiper and B20 Brake Fluid Level Switch<br>• (Extended Cab/Crew Cab) In the engine compartment, left rear, approximately 10 cm (3.9 in) from breakout to K160 Brake System Control Module, towards the rear of the vehicle | — | — |
| J133 | Body Harness | — | In the engine compartment, right front, approximately 14 cm (5.5 in) from breakout to X50A Fuse Block - Underhood | — | — |
| J134 | Body Harness | Regular Cab | In the engine compartment, right side, approximately 14 cm (5.5 in) from breakout to X50A Fuse Block - Underhood, towards the rear of the vehicle | — | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J150 | Engine Harness | — | • (L3B) In the engine compartment, approximately 3 cm (1.2 in) from breakout to Q38 Throttle Body<br>• (L82/L84/L87) In the engine compartment, approximately 5 cm (2 in) from breakout to B74 Mnaifold absolute Pressure Sensor<br>• (LM2) In the engine compartment, approximately 8 cm (3.1 in) from breakout to B75C Multifunction Intake Air Sensor<br>• (LV3) In engine compartment, left front, near breakout to K20 Engine Control Module | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Left Front (LM2)* | — |
| J151 | Engine Harness | — | • (L3B) In the engine compartment, approximately 22 cm (8.7 in) from breakout to B75C Multifunction Intake Air Sensor<br>• (L82/L84/L87) In the engine compartment, approximately 11 cm (4.3 in) from breakout to X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness<br>• (LM2) In the engine compartment, approximately 4 cm (1.6 in) from breakout to K69 Transfer Case Control Module<br>• (LV3) In engine compartment, left front, in section of harness between K20 Engine Control Module and B75C Multifunction Intake Air Sensor | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Left Front (LM2)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J152 | Engine Harness | — | • (L3B) In the engine compartment, approximately 7 cm (2.8 in) from breakout towards ignition coils and camshaft sensors/ actuators<br>• (L82/L84/L87) In the engine compartment, approximately 10 cm (3.9 in) from breakout towards ground G122<br>• (LV3) In engine compartment, left front, in section of harness between K20 Engine Control Module and B75C Multifunction Intake Air Sensor | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Right Rear (L82)*<br>• *Engine Harness Routing - Right Rear (L84/L87)* | — |
| J153 | Engine Harness | — | • (L3B) In the engine compartment, approximately 21 cm (8.3 in) from breakout to K69 Transfer Case Control Module<br>• (L82/L84/L87) In the engine compartment, approximately 4 cm (1.6 in) from breakout to inline connector X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness<br>• (LM2) In the engine compartment, approximately 3 cm (1.2 in) from breakout to B47B Fuel Rail Pressure Sensor<br>• (LV3) In engine compartment, left front, near breakout to K69 Transfer Case Control Module | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Left Front (LM2)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J154 | Engine Harness | — | • (L3B) In the engine compartment, approximately 15 cm (5.9 in) from breakout to B75C Multifunction Intake Air Sensor<br>• (L82/L84/L87) In the engine compartment, approximately 11 cm (4.3 in) from breakout to X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness<br>• (LM2) In the engine compartment, approximately 9 cm (3.5 in) from breakout towards G18 High Pressure Fuel Pump<br>• (LV3) In engine compartment, left front, between breakout to B75C Multifunction Intake Air Sensor and breakout to K69 Transfer Case Control Module | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Left Front (LM2)* | — |
| J155 | Engine Harness | — | • (L3B) In the engine compartment, approximately 3 cm (1.2 in) from breakout to inline connect X154 Engine Harness to Camshaft Position Sensor Jumper Harness<br>• (L82/L84/L87) In the engine compartment, approximately 19 cm (7.5 in) from breakout to X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness<br>• (LV3) In engine compartment, center front, between breakout to G1 A/C Compressor and breakout to X154 Engine Harness to Camshaft Position Sensor Jumper Harness<br>• (LM2) In the engine compartment, approximately 8 cm (3.1 in) from breakout to inline connector X171 Engine Harness to Chassis Harness | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Left Front (LM2)*<br>• *Engine Harness Routing - Right Rear (L3B)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J156 | Engine Harness | — | • (L3B) In the engine compartment, approximately 3 cm (1.2 in) from breakout towards ignition coils and camshaft sensors/ actuators<br>• (L82/L84/L87) In the engine compartment, approximately 7 cm (2.8 in) from breakout to ground G117<br>• (LM2) In the engine compartment, right side, approximately 12 cm (4.7 in) from breakout to exhaust system sensor components<br>• (LV3) In engine compartment, center front, between breakout to Q38 Throttle Body and breakout to B34 Coolant Temperature Sensor | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Left Front (LM2)* | — |
| J157 | Engine Harness | — | • (L3B) In the engine compartment, approximately 14 cm (5.5 in) from breakout towards ignition coils and camshaft sensors/ actuators<br>• (L82/L84/L87) In the engine compartment, approximately 18 cm (7.1 in) from breakout to inline connector X154 Engine Harness to Camshaft Position Sensor Jumper Harness<br>• (LM2) In the engine compartment, approximately 18 cm (7.1 in) from breakout to K69 Transfer Case Control Module<br>• (LV3) In the engine compartment, left side, top of engine, between breakout to T8A ignition Coil 1 and breakout to T8C Ignition Coil 3 | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Left Front (LM2)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J158 | Engine Harness | L82/L84/L87/ LV3 | • (L3B) In the engine compartment, approximately 4 cm (1.6 in) from breakout towards ignition coils and camshaft sensors/ actuators<br>• (L82/L84/L87) In the engine compartment, approximately 10 cm (3.9 in) from breakout to ground G121<br>• (LV3) In the engine compartment, left side, top of engine, between breakout to T8C Ignition Coil 3 and breakout to T8E Ignition Coil 5 | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Right Rear (L82)*<br>• *Engine Harness Routing - Right Rear (L84/L87)* | — |
| J159 | Engine Harness | L82/L84/L87/ LV3 | • (L82/L84/L87) In the engine compartment, approximately 6 cm (2.4 in) (LV3) In the engine compartment, center rear, at back of intake manifold, in breakout towards bank 2 ignition coils<br>• (LV3) In the engine compartment, rear center, behind intake manifold, approximately 17 cm (6.7 in) from breakout to T8F Ignition Coil 6 | • *Engine Harness Routing - Rear (LV3)*<br>• *Engine Harness Routing - Right Rear (L82)*<br>• *Engine Harness Routing - Right Rear (L84/L87)* | — |
| J160 | Engine Harness | L82/L84/L87/ LV3 | • (LV3) In the engine compartment, right rear, between breakout to ground G122 and breakout to T8D Ignition Coil 4<br>• (L82/L84/L87) In the engine compartment, approximately 14 cm (5.5 in) from breakout towards ground G122 | • *Engine Harness Routing - Rear (LV3)*<br>• *Engine Harness Routing - Right Rear (L82)*<br>• *Engine Harness Routing - Right Rear (L84/L87)* | — |
| J161 | Engine Harness | L3B/L82/L84/ L87/LV3 | • (L3B) In the engine compartment, approximately 11 cm (4.3 in) from breakout towards ignition coils and camshaft sensors/ actuators<br>• (L82/L84/L87) In the engine compartment, in the breakout towards Q38 Throttle Body<br>• (LV3) In the engine compartment, right rear, in breakout to Ground G121 on rear of bank 2 cylinder head | • *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Rear (LV3)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J162 | Engine Harness | L3B/L82/L84/L87/LV3 | • (L3B) In the engine compartment, right front, approximately 4 cm (1.6 in) from breakout to X50D Fuse Block - Battery<br>• (L82/L84/L87) In the engine compartment, approximately 7 cm (2.8 in) from breakout toward G1 A/C Compressor<br>• (LV3) Under vehicle, left side of transmission, behind breakout to B52C Heated Oxygen Sensor - Bank 1 Sensor 1 and B52D Heated Oxygen Sensor Bank 1 Sensor 2 | • *Engine Harness Routing - Rear (LV3)*<br>• *Engine Harness Routing - Right Rear (L82)*<br>• *Engine Harness Routing - Right Rear (L84/L87)* | — |
| J163 | Engine Harness | — | • (L3B) In the engine compartment, approximately 13 cm (5.1 in) from breakout to K69 Transfer Case Control Module<br>• (L82/L84/L87) In the engine compartment, approximately 7 cm (2.8 in) from breakout toward G1 A/C Compressor<br>• (LM2) In the engine compartment, left side, in breakout to X50B Fuse Block - Underhood Auxiliary<br>• (LV3) Under vehicle, left side of transmission, behind breakout to B52C Heated Oxygen Sensor - Bank 1 Sensor 1 and B52D Heated Oxygen Sensor Bank 1 Sensor 2 | • *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (LM2)*<br>• *Engine Harness Routing - Rear (LV3)*<br>• *Engine Harness Routing - Right Rear (L82)*<br>• *Engine Harness Routing - Right Rear (L84/L87)* | — |
| J164 | Engine Harness | MYC | • (L82) In the engine compartment, left front, approximately 8 cm (3.1 in) from breakout to B75C Multifunction Intake Air Sensor<br>• (LV3) Under vehicle, above rear of transmission, left of breakout to B52F Heated Oxygen Sensor - Bank 2 Sensor 2 | • *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Rear (LV3)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J165 | Engine Harness | — | • (L3B) In the engine compartment, right front, approximately 3 cm (1.2 in) from breakout to B34B Engine Coolant Temperature Sensor 2<br>• (L82/L84/L87) In the engine compartment, approximately 5 cm (2 in) from breakout to X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness<br>• (LM2) In the engine compartment, approximately 14 cm (5.5 in) from breakout to B271 Engine Block Temperature Sensor<br>• (LV3) Under vehicle, above rear of transmission, left of breakout to B52F Heated Oxygen Sensor - Bank 2 Sensor 2 | • *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Left Front (LM2)*<br>• *Engine Harness Routing - Rear (LV3)*<br>• *Engine Harness Routing - Right Rear (L3B)* | — |
| J166 | Engine Harness | — | • (L3B) In the engine compartment, approximately 7 cm (2.8 in) from breakout towards ignition coils and camshaft sensors/ actuators<br>• (L82/L84/L87) In the engine compartment, in breakout to B68A Knock Sensor 1 and B37B Engine Oil Pressure Sensor<br>• (LM2) In the engine compartment, approximately 15 cm (5.9 in) from breakout towards G18 High Pressure Fuel Pump<br>• (LV3) In the engine compartment, left front, approximately 7 cm (2.8 in) from breakout to T10L Cooling Fan Motor - Left | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Left Front (LM2)* | — |
| J167 | Engine Harness | MQE | • (L3B) In the engine compartment, approximately 57 cm (22.4 in) from breakout to B26 Crankshaft Position Sensor<br>• (L84) In the engine compartment, approximately 9 cm (3.5 in) from breakout to K71 Transmission Control Module | *Engine Harness Routing - Left Front (L3B)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J168 | Transmission Case Harness | MQE | Under the vehicle, within T12 Automatic Transmission Assembly | — | — |
| J170 | Engine Harness | VTI/WMI | • (L3B) In the engine compartment, approximately 7 cm (2.4 in) from breakout to B75C Multifunction Intake Air Sensor<br>• (L82/L84/L87) In the engine compartment, approximately 15 cm (5.9 in) from breakout to inline connector X156 Engine Harness to Active Fuel Management Solenoid Jumper Harness<br>• (LM2) In the engine compartment, approximately 12 cm (4.7 in) from breakout to G13 Generator | • *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (LM2)* | — |
| J172 | Engine Harness | LM2 | In the engine compartment, above the engine, approximately 4 cm (1.6 in) from breakout to B195A Nitrogen Oxides Sensor 1, towards the right side of the vehicle | — | — |
| J173 | Engine Harness | — | • (L3B) In the engine compartment, approximately 17 cm (6.7 in) from breakout to K69 Transfer Case Control Module<br>• (L82/L84/L87) In the engine compartment, in the breakout towards Q38 Throttle Body<br>• (LM2) In the engine compartment, approximately 14 cm (5.5 in) from breakout to B271 Engine Block Temperature Sensor<br>• (LV3) In the engine compartment, right front, in breakout to G10R Cooling Fan Motor - Right | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (L82)*<br>• *Engine Harness Routing - Left Front (LM2)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J174 | Engine Harness | MQB/MQE | • (L3B) In the engine compartment, approximately 11 cm (4.3 in) from breakout to B75C Multifunction Intake Air Sensor<br>• (L84/L87) In the engine compartment, in the breakout towards Q38 Throttle Body<br>• (LM2) In the engine compartment, approximately 23 cm (9.1 in) from breakout to B271 Engine Block Temperature Sensor | • *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (LM2)* | — |
| J175 | Engine Harness | L3B/LM2 | • (L3B) In the engine compartment, approximately 25 cm (9.8 in) from breakout to K69 Transfer Case Control Module<br>• (LM2) In the engine compartment, left side, approximately 4 cm (1.6 in) from breakout towards X115 Engine Harness to Body Harness and X50B Fuse Block - Underhood Auxiliary | • *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (LM2)* | — |
| J176 | Engine Harness | LM2 | In the engine compartment, left side, in breakout to X50B Fuse Block - Underhood Auxiliary | *Engine Harness Routing - Left Front (LM2)* | — |
| J177 | Engine Harness | LM2 | In the engine compartment, left side, in breakout to X50B Fuse Block - Underhood Auxiliary | *Engine Harness Routing - Left Front (LM2)* | — |
| J178 | Engine Harness | L3B/LV3/L82/ L84/L87 | • (L3B) In the engine compartment, approximately 6 cm (2.4 in) from breakout towards ignition coils and camshaft sensors/ actuators<br>• (L82/L84/L87) In the engine compartment, approximately 11 cm (4.3 in) from breakout to inline connector X154 Engine Harness to Camshaft Position Sensor Jumper Harness<br>• (LM2) In the engine compartment, approximately 4 cm (1.6 in) from breakout to B35 Engine Oil Level Switch, towards the rear of the vehicle | • *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (L82)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J179 | Engine Harness | LV3/L82/L84/ L87 | • (L82/L84/L87) In the engine compartment, approximately 18 cm (7.1 in) from breakout to ground G121<br>• (LV3) In the engine compartment, front center, in engine harness, below the crankshaft balancer | • *Engine Harness Routing - Left (LV3)*<br>• *Engine Harness Routing - Right Rear (L82)*<br>• *Engine Harness Routing - Right Rear (L84/L87)* | — |
| J180 | Engine Harness | MQE | • (L3B) In the engine compartment, approximately 35 cm (13.8 in) from breakout to B26 Crankshaft Position Sensor<br>• (L84) In the engine compartment, approximately 22 cm (8.7 in) from breakout to B52C Heated Oxygen Sensor - Bank 1 Sensor 1 | • *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Right Rear (L84/L87)* | — |
| J181 | Engine Harness | MQE | • (L3B) In the engine compartment, approximately 45 cm (17.7 in) from breakout to B26 Crankshaft Position Sensor<br>• (L84) In the engine compartment, approximately 27 cm (10.6 in) from breakout to B52C Heated Oxygen Sensor - Bank 1 Sensor 1 | • *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Right Rear (L84/L87)* | — |
| J182 | Engine Harness | L3B/LM2 | • (L3B) In the engine compartment, approximately 19 cm (7.5 in) from breakout to B75C Multifunction Intake Air Sensor<br>• (LM2) In the engine compartment, approximately 10 cm (3.9 in) from breakout to K69 Transfer Case Control Module | • *Engine Harness Routing - Left Front (L3B)*<br>• *Engine Harness Routing - Left Front (LM2)* | — |
| J183 | Transmission Control Harness | — | Under the vehicle, within T12 Automatic Transmission Assembly | — | — |
| J186 | Transmission Case Harness | — | Under the vehicle, within T12 Automatic Transmission Assembly | — | — |
| J187 | Transmission Control Harness | — | Under the vehicle, within T12 Automatic Transmission Assembly | — | — |
| J189 | Engine Harness | L3B | In the engine compartment, right side, approximately 4 cm (1.6 in) from breakout to inline connector X154 Engine Harness to Camshaft Position Sensor Jumper Harness | *Engine Harness Routing - Right Rear (L3B)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J192 | Chassis Harness | JL1 | In the engine compartment, right side, approximately 8 cm (3.1 in) from breakout to X50A Fuse Block - Underhood, towards the rear of the vehicle | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | — |
| J200 | Body Harness | — | In the passenger compartment, front center, forward of instrument panel, approximately 12 cm (4.7 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Extended Cab)*<br>• *Body Harness Routing - Left Front (Regular Cab)* | — |
| J201 | Body Harness | — | In the passenger compartment, front center, forward of instrument panel, approximately 16 cm (6.3 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Extended Cab)*<br>• *Body Harness Routing - Left Front (Regular Cab)* | — |
| J202 | Body Harness | — | In the passenger compartment, front center, forward of instrument panel, approximately 20 cm (7.9 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Regular Cab)*<br>• *Body Harness Routing - Right Front (Extended Cab)* | — |
| J203 | Body Harness | — | In the passenger compartment, front center, forward of instrument panel, approximately 24 cm (9.4 in) from breakout to B107 Accelerator Pedal Position Sensor, towards center of vehicle | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Regular Cab)*<br>• *Body Harness Routing - Right Front (Extended Cab)* | — |
| J206 | Body Harness | — | In the passenger compartment, right front, forward of instrument panel, approximately 52 cm (20.5 in) from breakout to bulkhead grommet, towards center of vehicle | *Body Harness Routing - Right Front (Regular Cab)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J207 | Body Harness | — | In the passenger compartment, right front, forward of instrument panel, approximately 47 cm (18.5 in) from breakout to bulkhead grommet, towards center of vehicle | • *Body Harness Routing - Right Front (Crew Cab)*<br>• *Body Harness Routing - Right Front (Extended Cab)*<br>• *Body Harness Routing - Right Front (Regular Cab)* | — |
| J208 | Body Harness | — | In the passenger compartment, right front, forward of instrument panel, approximately 5 cm (2 in) from breakout to bulkhead grommet, towards center of vehicle | *Body Harness Routing - Right Front (Regular Cab)* | — |
| J209 | Body Harness | — | In the passenger compartment, left front, behind left front kick panel, approximately 19 cm (7.5 in) from breakout to X51L Fuse Block - Instrument Panel Left, towards the rear of the vehicle | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Extended Cab)* | — |
| J210 | Body Harness | A48 | In the passenger compartment, left front, behind left front kick panel, in breakout to X51L Fuse Block - Instrument Panel Left | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Extended Cab)* | — |
| J211 | Body Harness | LM2 | In the body harness | • *Body Harness Routing - Right Front (Crew Cab)*<br>• *Body Harness Routing - Right Front (Extended Cab)* | — |
| J225 | Instrument Panel Harness | — | In the passenger compartment, left front, within instrument panel, behind S30 Headlamp Switch | *Instrument Panel Harness Routing* | — |
| J226 | Instrument Panel Harness | -BTM | In the passenger compartment, left front, within instrument panel, approximately 13 cm (5.1 in) from breakout to P16 Instrument Cluster, towards the left side of the vehicle | *Instrument Panel Harness Routing* | — |
| J227 | Instrument Panel Harness | — | In the passenger compartment, left front, within instrument panel, approximately 3 cm (1.2 in) from breakout to P16 Instrument Cluster, towards the left side of the vehicle | *Instrument Panel Harness Routing* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J228 | Instrument Panel Harness | — | In the passenger compartment, left front, within instrument panel, approximately 8 cm (3.1 in) from breakout to P16 Instrument Cluster, towards the right side of the vehicle | *Instrument Panel Harness Routing* | — |
| J229 | Instrument Panel Harness | UV6 | In the passenger compartment, left front, within instrument panel, approximately 8 cm (3.1 in) from breakout to P16 Instrument Cluster, towards the right side of the vehicle | *Instrument Panel Harness Routing* | — |
| J230 | Instrument Panel Harness | — | In the passenger compartment, left front, within instrument panel, approximately 24 cm (9.4 in) from breakout to P16 Instrument Cluster, towards the right side of the vehicle | *Instrument Panel Harness Routing* | — |
| J231 | Instrument Panel Harness | UE1 | In the passenger compartment, left front, within instrument panel harness, in breakout to K56 Serial Data Gateway Module | *Instrument Panel Harness Routing* | — |
| J232 | Instrument Panel Harness | — | In the passenger compartment, left front, within instrument panel harness, in breakout to K56 Serial Data Gateway Module | *Instrument Panel Harness Routing* | — |
| J233 | Instrument Panel Harness | — | In the passenger compartment, front center, within instrument panel, approximately 4 cm (1.6 in) from breakout to K60 Steering Column Lock Module, towards the right side of the vehicle | *Instrument Panel Harness Routing* | — |
| J234 | Instrument Panel Harness | — | In the passenger compartment, front center, within instrument panel, approximately 14 cm (5.5 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the left side of the vehicle | *Instrument Panel Harness Routing* | — |
| J235 | Instrument Panel Harness | — | In the passenger compartment, front center, within instrument panel, approximately 9 cm (3.5 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the left side of the vehicle | *Instrument Panel Harness Routing* | — |
| J236 | Instrument Panel Harness | — | In the passenger compartment, front center, within instrument panel, approximately 24 cm (9.4 in) from breakout to K60 Steering Column Lock Module, towards the right side of the vehicle | *Instrument Panel Harness Routing* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J237 | Instrument Panel Harness | — | In the passenger compartment, front center, within instrument panel, approximately 12 cm (4.7 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the right side of the vehicle | *Instrument Panel Harness Routing* | — |
| J238 | Instrument Panel Harness | UEU/UE1/UDD | In the passenger compartment, front center, within instrument panel, approximately 12 cm (4.7 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the right side of the vehicle | *Instrument Panel Harness Routing* | — |
| J239 | Instrument Panel Harness | — | In the passenger compartment, front center, within instrument panel, approximately 23 cm (9.1 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the right side of the vehicle | *Instrument Panel Harness Routing* | — |
| J240 | Instrument Panel Harness | JL1 | In the passenger compartment, front center, within instrument panel, approximately 23 cm (9.1 in) from breakout to B10B Ambient Light/Sunload Sensor, towards the right side of the vehicle | *Instrument Panel Harness Routing* | — |
| J241 | Instrument Panel Harness | — | In the passenger compartment, front, within instrument panel, on the left side of the instrument panel, in breakout going towards the floor | *Instrument Panel Harness Routing* | — |
| J242 | Instrument Panel Harness | — | In the passenger compartment, right front, within instrument, in front of the left side of the glove box | *Instrument Panel Harness Routing* | — |
| J271 | Steering Wheel Harness | KI3 | In the passenger compartment, within the steering wheel | — | — |
| J281 | Body Harness | — | In the passenger compartment, left front, below driver A-pillar, between breakout to B22 Brake Pedal Position Sensor and breakout to inline connector X500 Driver Door Harness to Body Harness | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Extended Cab)*<br>• *Body Harness Routing - Left Front (Regular Cab)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J282 | Body Harness | — | In the passenger compartment, right front, behind passenger side kick panel, approximately 5 cm (4.3 in) from breakout to X51R Fuse Block - Instrument Panel Right, towards rear of vehicle | • *Body Harness Routing - Right Front (Crew Cab)*<br>• *Body Harness Routing - Right Front (Extended Cab)*<br>• *Body Harness Routing - Right Front (Regular Cab)* | — |
| J297 | Steering Wheel Harness | — | In the passenger compartment, left front, within steering wheel | — | — |
| J310 | Driver Seat Harness | A45 | In the passenger compartment, left front, within driver seat | — | — |
| J311 | Driver Seat Harness | A45/A2X | In the passenger compartment, left front, within driver seat | — | — |
| J314 | Driver Seat Harness | — | In the passenger compartment, left front, within driver seat | — | — |
| J316 | Driver Seat Harness | KQV | In the passenger compartment, left front, within driver seat | — | — |
| J317 | Driver Seat Harness | KQV | In the passenger compartment, left front, within driver seat | — | — |
| J319 | Driver Seat Harness | KA1 | In the passenger compartment, left front, within driver seat | — | — |
| J321 | Body Harness | BTM+(UD5/UD7) | In the passenger compartment, left rear, underneath driver seat, approximately 10 cm (3.9 in) from breakout to inline connector X310 Driver Seat Harness to Body Harness, towards left side of vehicle | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Extended Cab)*<br>• *Body Harness Routing - Left Front (Regular Cab)* | — |
| J322 | Passenger Seat Harness | — | In the passenger compartment, right front, within passenger seat | — | — |
| J323 | Body Harness | — | In the passenger compartment, left rear, underneath driver seat, approximately 15 cm (5.9 in) from breakout to inline connector X310 Driver Seat Harness to Body Harness, towards center of vehicle | • *Body Harness Routing - Left Front (Regular Cab)*<br>• *Body Harness Routing - Right Front (Crew Cab)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J325 | Body Harness | — | In the passenger compartment, left rear, underneath driver seat, approximately 25 cm (9.8 in) from breakout to inline connector X310 Driver Seat Harness to Body Harness, towards center of vehicle | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Extended Cab)*<br>• *Body Harness Routing - Left Front (Regular Cab)* | — |
| J326 | Body Harness | — | In the passenger compartment, right rear, underneath passenger seat, between breakout to ground G312 and breakout to inline connector X348 Front Center Seat Harness to Body Harness | • *Body Harness Routing - Right Front (Crew Cab)*<br>• *Body Harness Routing - Right Front (Extended Cab)*<br>• *Body Harness Routing - Right Front (Regular Cab)* | — |
| J327 | Instrument Panel Harness | — | In the passenger compartment, left rear, underneath driver seat, approximately 38 cm (15 in) from breakout to inline connector X310 Driver Seat Harness to Body Harness, towards center of vehicle | • *Body Harness Routing - Left Front (Crew Cab)*<br>• *Body Harness Routing - Left Front (Extended Cab)*<br>• *Body Harness Routing - Left Front (Regular Cab)* | — |
| J329 | Body Harness | KA1 | In the passenger compartment, right front, within passenger seat back | — | — |
| J330 | Body Harness | UVI/UV2 | In the passenger compartment, in the body harness | — | — |
| J333 | Floor Console Harness | KA6 | In passenger compartment, beneath floor console, between breakout to X348 Body Harness to Floor Console inline connector and breakout to center console compartment | *Floor Console Harness Routing* | — |
| J334 | Floor Console Harness | AZ3/D07 | In passenger compartment, beneath floor console, between breakout to X348 Body Harness to Floor Console inline connector and breakout to center console compartment | *Floor Console Harness Routing* | — |
| J335 | Floor Console Harness | AZ3/D07 | In passenger compartment, beneath floor console, between breakout to X348 Body Harness to Floor Console inline connector and breakout to center console compartment | *Floor Console Harness Routing* | — |
| J336 | Floor Console Harness | IOS/IOT | In the passenger compartment, beneath floor console, in the breakout to X83 Auxiliary Audio Input | *Floor Console Harness Routing* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J351 | Headliner Harness | — | • (Regular Cab) In passenger compartment, right front, behind passenger side A-pillar trim panel<br>• (Extended Cab) In passenger compartment, right front, behind passenger side A-pillar trim panel<br>• (Crew Cab) In passenger compartment, right front, behind passenger side A-pillar trim panel | • *Headliner Harness Routing*<br>• *Headliner Harness Routing (Extended Cab)* | — |
| J353 | Headliner Harness | DH6 | In passenger compartment, right front, above headliner, right of breakout to A3R Sunshade - Right | • *Headliner Harness Routing*<br>• *Headliner Harness Routing (Extended Cab)* | — |
| J354 | Headliner Harness | DD8/DRZ/UEU | In passenger compartment, front, above headliner, between breakout to R6E Terminating Resistor - High Speed Extension Bus 1 and breakout to A98 Front Overhead Console Assembly | *Headliner Harness Routing (Extended Cab)* | — |
| J355 | Headliner Harness | Extended Cab/ Crew Cab | In the passenger compartment, right front, above headliner, near passenger A-pillar, in breakout towards rear of vehicle | *Headliner Harness Routing (Extended Cab)* | — |
| J370 | Rear Seat Harness | KA6 | In the passenger compartment, rear, within rear seat | — | — |
| J390 | Chassis Harness | LM2 | Under the vehicle, inside of the right frame rail, near the rear of the transmission crossmember | *Chassis Harness Routing (Extended Cab/Crew Cab)* | — |
| J391 | Chassis Harness | LM2 | Outside of the vehicle, below right rear door, outside of the frame rail, in breakout to B136 Exhaust Particulate Matter Sensor | *Chassis Harness Routing (Extended Cab/Crew Cab)* | — |
| J392 | Chassis Harness | LM2 | Outside of the vehicle, below right rear door, outside of the frame rail, in breakout to B136 Exhaust Particulate Matter Sensor | *Chassis Harness Routing (Extended Cab/Crew Cab)* | — |
| J393 | Chassis Harness | LM2 | Outside of the vehicle, below right rear door, outside of the frame rail, forward of breakout to B136 Exhaust Particulate Matter Sensor | *Chassis Harness Routing (Extended Cab/Crew Cab)* | — |
| J394 | Chassis Harness | BRS | Outside of the vehicle, below right rear door, outside of the frame rail, approximately 21 cm (8.3 in) from breakout to K4 Assist Step Control Module, towards the front of the vehicle | *Chassis Harness Routing (Extended Cab/Crew Cab)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J410 | Left Tail Lamp Harness | — | Outside of the vehicle, left rear corner, within E42L Tail Lamp Assembly - Left | — | — |
| J411 | Left Tail Lamp Harness | X88+Base | At the left rear of vehicle, within E42L Tail Lamp Assembly - Left | — | — |
| J412 | Left Tail Lamp Harness | X88+Base | At the left rear of vehicle, within E42L Tail Lamp Assembly - Left | — | — |
| J420 | Right Tail Lamp Harness | — | Outside of the vehicle, right rear corner, within E42R Tail Lamp Assembly - Right | — | — |
| J421 | Right Tail Lamp Harness | X88+Base | At the right rear of vehicle, within E42R Tail Lamp Assembly - Right | — | — |
| J422 | Right Tail Lamp Harness | X88+Base | At the right rear of vehicle, within E42R Tail Lamp Assembly - Right | — | — |
| J475 | Chassis Harness | LM2 | Under the vehicle, right rear corner, inside of the right frame rail, approximately 21 cm (8.3 in) from breakout towards fuel tank, towards the front of the vehicle | *Chassis Harness Routing (Extended Cab/Crew Cab)* | — |
| J476 | Chassis Harness | — | • (Regular Cab) Under the vehicle, right rear corner, inside of the right frame rail, approximately 5 cm (2 in) from breakout towards fuel tank, towards the front of the vehicle<br>• (Extended Cab/Crew Cab) Under the vehicle, right rear corner, inside of the right frame rail, approximately 11 cm (4.3 in) from breakout towards fuel tank, towards the front of the vehicle | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | — |
| J477 | Chassis Harness | — | • (Regular Cab) Under the vehicle, at the right rear corner, approximately 17 cm (6.7 in) from breakout to inline connector X420 Right Taillamp Harness to Body Harness, towards the front of the vehicle<br>• (Extended Cab/Crew Cab) Under the vehicle, right rear corner, inside of right side frame rail, approximately 45 cm (17.8 in) from breakout to K101 Trailer Interface Control Module, towards the front of the vehicle | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J478 | Chassis Harness | — | • (Regular Cab) Under the vehicle, at the right rear corner, inside of right side frame rail, approximately 33 cm (13 in) from breakout to inline connector X420 Right Taillamp Harness to Body Harness, towards the front of the vehicle<br>• (Extended Cab/Crew Cab) Under the vehicle, right rear corner, inside of right side frame rail, approximately 10 cm (3.9 in) from breakout to K101 Trailer Interface Control Module, towards the front of the vehicle | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | — |
| J479 | Chassis Harness | U1D | Under the vehicle, right rear corner, inside of right side frame rail, approximately 5 cm (2 in) from breakout to K101 Trailer Interface Control Module, towards the front of the vehicle | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | — |
| J480 | Chassis Harness | — | Under the vehicle, at the right rear corner, approximately 28 cm (11 in) from breakout to inline connector X420 Right Taillamp Harness to Body Harness, towards the front of the vehicle | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | — |
| J481 | Chassis Harness | — | At the rear of the vehicle, in front of the rear bumper, approximately 5 cm (2 in) from breakout to ground G400, towards the left side of the vehicle | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | — |
| J482 | Chassis Harness | IOS/IOT | At the rear of the vehicle, in front of the rear bumper, in breakout to T10E Keyless Entry Antenna - Rear Compartment | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | — |
| J483 | Chassis Harness | IOS/IOT | • (Regular Cab) At the rear of the vehicle, in front of the rear bumper, in breakout to X88 Trailer Connector<br>• (Extended Cab/Crew Cab) At the rear of the vehicle, in front of the rear bumper, in breakout to T10E Keyless Entry Antenna - Rear Compartment | • *Chassis Harness Routing (Extended Cab/Crew Cab)*<br>• *Chassis Harness Routing (Regular Cab)* | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J490 | Rear Bumper Harness | UD5/UD7 | At the rear of the vehicle, left of center, between breakout to E7L License Plate Lamp - Left and E7R License Plate Lamp - Right | *Rear Bumper Harness Routing* | — |
| J491 | Rear Bumper Harness | UKC | At the rear of the vehicle, left of center, between breakout to E7L License Plate Lamp - Left and E7R License Plate Lamp - Right | *Rear Bumper Harness Routing* | — |
| J492 | Rear Bumper Harness | UKC | At the rear of the vehicle, center, between breakout to E7L License Plate Lamp - Left and E7R License Plate Lamp - Right | *Rear Bumper Harness Routing* | — |
| J493 | Rear Bumper Harness | UKC | At the rear of the vehicle, right of center, between breakout to E7L License Plate Lamp - Left and E7R License Plate Lamp - Right | *Rear Bumper Harness Routing* | — |
| J494 | Rear Bumper Harness | E63 | At the rear of the vehicle, right of center, approximately 5 cm (2 in) from breakout to inline connector X901 Rear Bumper Harness to Chassis Harness | *Rear Bumper Harness Routing* | — |
| J495 | Rear Bumper Harness | UD5/UD7 | At the rear of the vehicle, within the rear bumper harness, in breakout to B306F Parking Assist Sensor - Rear Left Middle | *Rear Bumper Harness Routing* | — |
| J496 | Rear Bumper Harness | E63 | At the rear of the vehicle, within the rear bumper harness, in breakout to E7L License Plate Lamp - Left | *Rear Bumper Harness Routing* | — |
| J501 | Driver Door Harness | AXG | In driver door, between breakout to P19AG Speaker - Left Front Door and breakout to B63LF Side Impact Sensor - Left Front | — | — |
| J502 | Driver Door Harness | — | • (Regular Cab) In driver door, between breakout to P19AG Speaker - Left Front Door and breakout to B63LF Side Impact Sensor - Left Front<br>• (Extended Cab/Crew Cab) In driver door, between breakout to B63LF Side Impact Sensor - Left Front and breakout to A24D Door Handle Assembly - Driver Exterior | *Driver and Passenger Door Harnesses* | — |
| J503 | Driver Door Harness | AU3/AXG | Attached to driver door trim, between breakout to S146 Window/Outside Rearview Mirror Switch and breakout to E63D Flood Lamp - Driver Door Handle | *Driver and Passenger Door Trim Harnessses* | — |
| J510 | Driver OSRVM Harness | — | Outside of the vehicle, left side, inside of A9A Outside Rearview Mirror - Driver | — | — |

## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J601 | Passenger Door Harness | AEF | In passenger door, between breakout to P19AH Speaker - Right Front Door and breakout to B63RF Side Impact Sensor - Right Front | *Driver and Passenger Door Harnesses* | — |
| J602 | Passenger Door Harness | — | • (Regular Cab) In passenger door, between breakout to B63RF Side Impact Sensor - Right Front and breakout to A24P Door Handle Assembly - Passenger Exterior<br>• (Extended Cab/Crew Cab) In passenger door, between breakout to P19AH Speaker - Right Front Door and breakout to B63RF Side Impact Sensor - Right Front | *Driver and Passenger Door Harnesses* | — |
| J603 | Passenger Door Harness | — | Attached to passenger door trim, between breakout to S79P Window Switch - Passenger and breakout to E63P Flood Lamp - Passenger Door Handle | *Driver and Passenger Door Trim Harnessses* | — |
| J610 | Passenger OSRVM Harness | — | Outside of the vehicle, right side, inside of A9B Outside Rearview Mirror - Passenger | — | — |
| J701 | Left Rear Door Harness | Extended Cab/ Crew Cab | • (Extended Cab) In left rear door, in the left rear door harness, approximately 13 cm (5.1 in) from breakout to B63LR Side Impact Sensor - Left Rear, towards the rear of the vehicle<br>• (Crew Cab) In the left rear door, in the left rear door harness, approximately 12 cm (4.7 in) from breakout to M74LR Window Motor - Left Rear, towards the rear of the vehicle | • *Left Rear and Right Rear Door Harnesses (Crew Cab)*<br>• *Left Rear and Right Rear Door Harnesses (Extended Cab)* | — |
| J801 | Right Rear Door Harness | Extended Cab/ Crew Cab | • (Extended Cab) In the right rear door, in the right rear door harness, approximately 5 cm (2 in) from breakout to P19AM Speaker - Right Rear Door, towards the rear of the vehicle<br>• (Crew Cab) In the right rear door, in the right rear door harness, approximately 12 cm (4.7 in) from breakout to M74RR Window Motor - Right Rear, towards the rear of the vehicle | • *Left Rear and Right Rear Door Harnesses (Crew Cab)*<br>• *Left Rear and Right Rear Door Harnesses (Extended Cab)* | — |

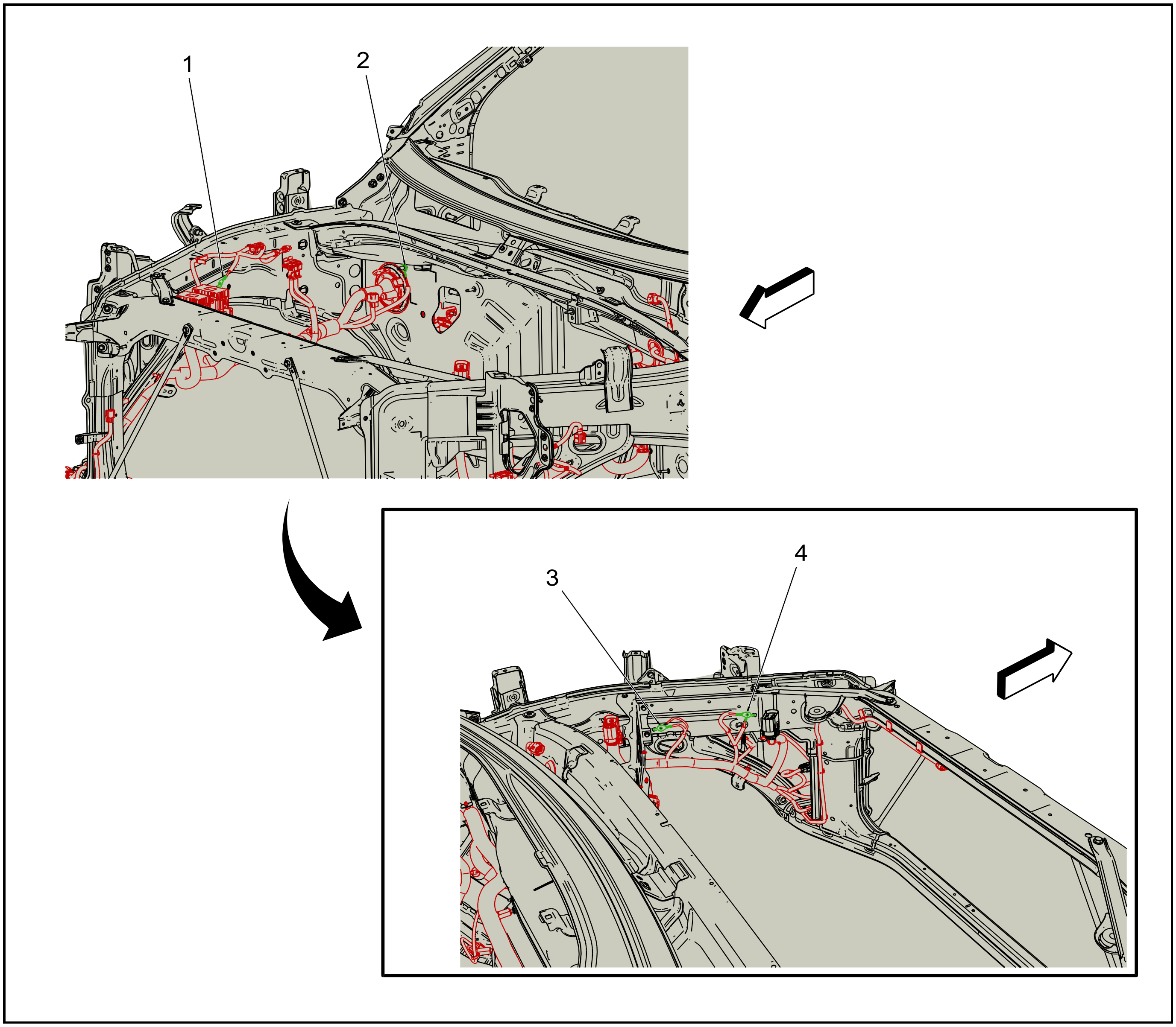
## Master Electrical Component List (cont'd)

| Code | Name | Option | Location | Locator View | Connector End View |
|---|---|---|---|---|---|
| J900 | Endgate Harness | QT5 | Outside of the vehicle, within the endgate, approximately 16 cm (6.3 in) from breakout to inline connector X926, twoards left side of vehicle | *Endgate Harness Routing (QK2)* | — |
| J901 | Endgate Harness | QT5 | Outside of the vehicle, within the endgate, approximately 28 cm (11 in) from breakout to inline connector X926, twoards left side of vehicle | *Endgate Harness Routing (QK2)* | — |
| J902 | Endgate Harness | QK2 | Outside of the vehicle, within the endgate, approximately 38 cm (15 in) from breakout to inline connector X926, twoards left side of vehicle | *Endgate Harness Routing (QK2)* | — |
| J903 | Endgate Harness | QK2 | Outside of the vehicle, within the endgate, approximately 51 cm (20 in) from breakout to inline connector X926, twoards left side of vehicle | *Endgate Harness Routing (QK2)* | — |
| J904 | Endgate Harness | QT5/QT6 | Outside of the vehicle, within the endgate, approximately 22 cm (8.7 in) from breakout to E2A Marker Lamp - Endgate, towards the right side of the vehicle | *Endgate Harness Routing (QK2)* | — |

# Wiring Systems and Power Management

## Ground Views

### G110, G114, G120, and G128

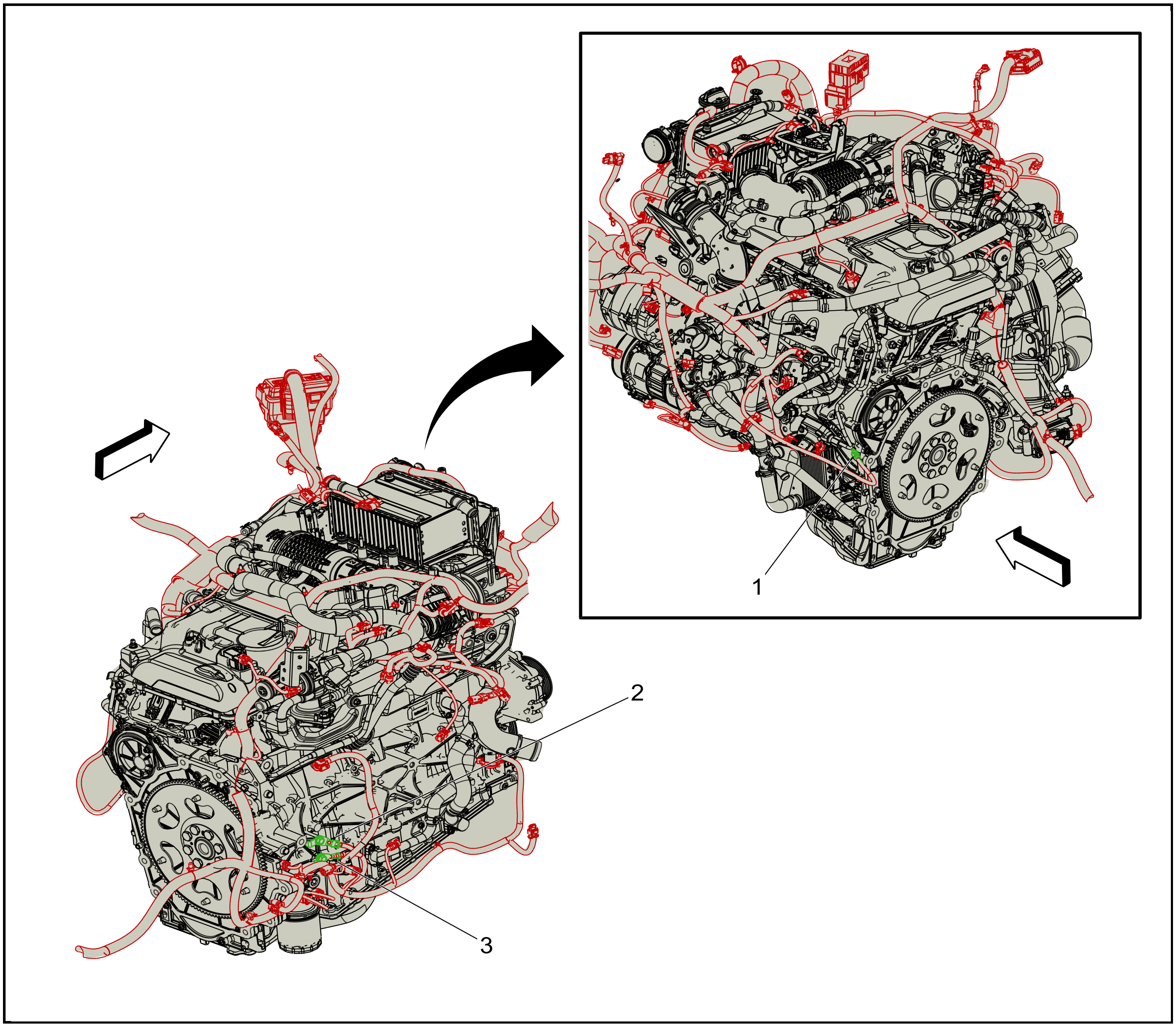


5023373

**Items**

| | |
|---|---|
| (1) | G120 Body Harness |
| (2) | G128 Body Harness |
| (3) | G110 Body Harness |
| (4) | G114 Engine Harness |

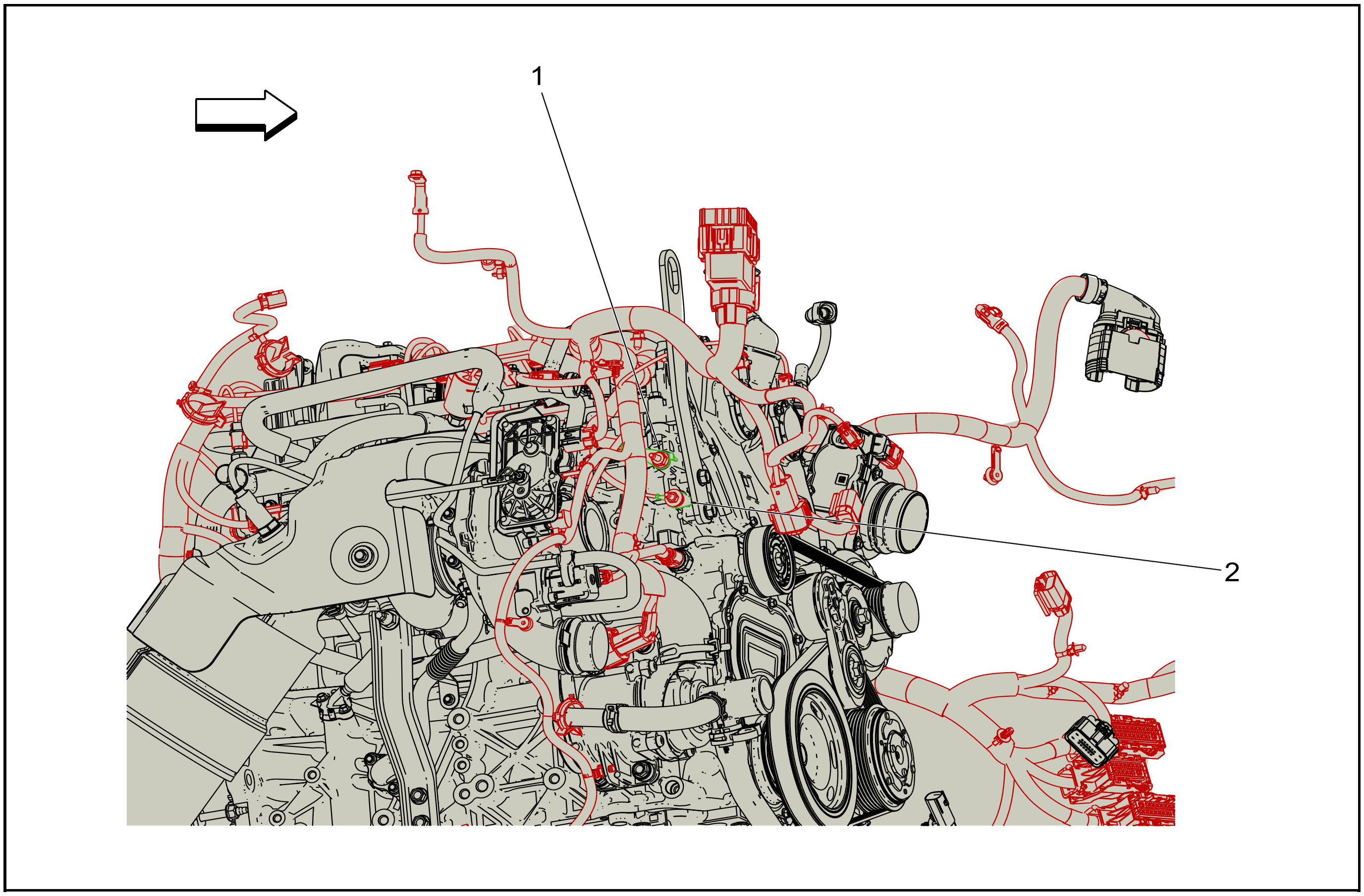
## G115, G117, and G118 (LM2)



**Items**

| | |
|---|---|
| (1) | G118 Engine Harness (LM2) |
| (2) | G117 Engine Harness |
| (3) | G115 Engine Harness |

## G115 and G121 (L3B)

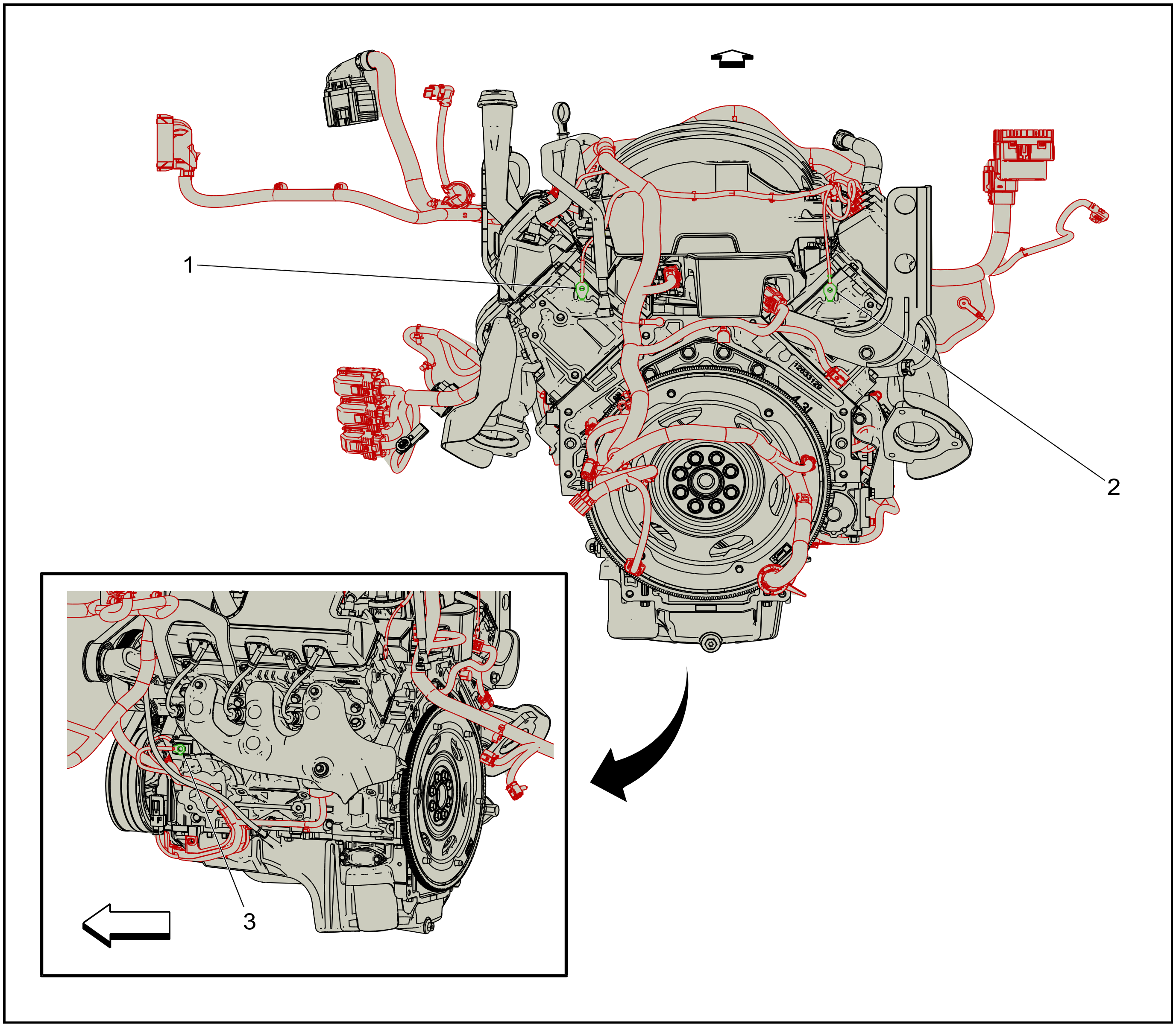


5034755

**Items**

| | |
|---|---|
| (1) | G115 Engine Harness |
| (2) | G121 Engine Harness |

## G117, G121, and G122 (LV3)



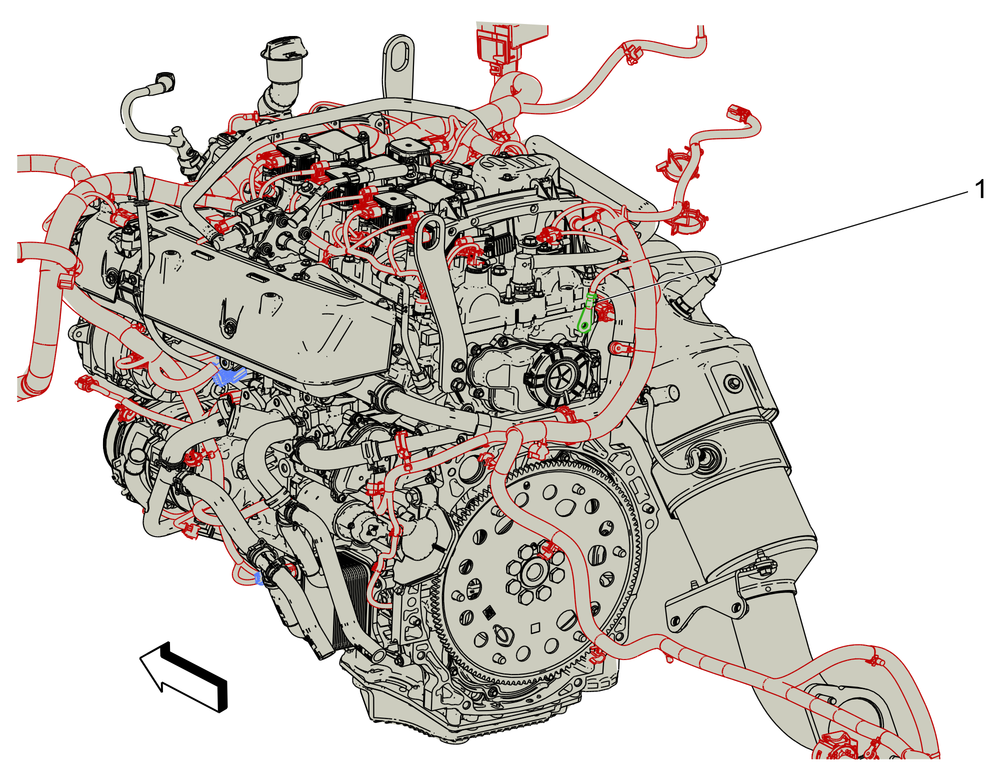
**Items**

(1) G121 Engine Harness

(2) G122 Engine Harness

(3) G117 Engine Harness

## G117 (L3B)

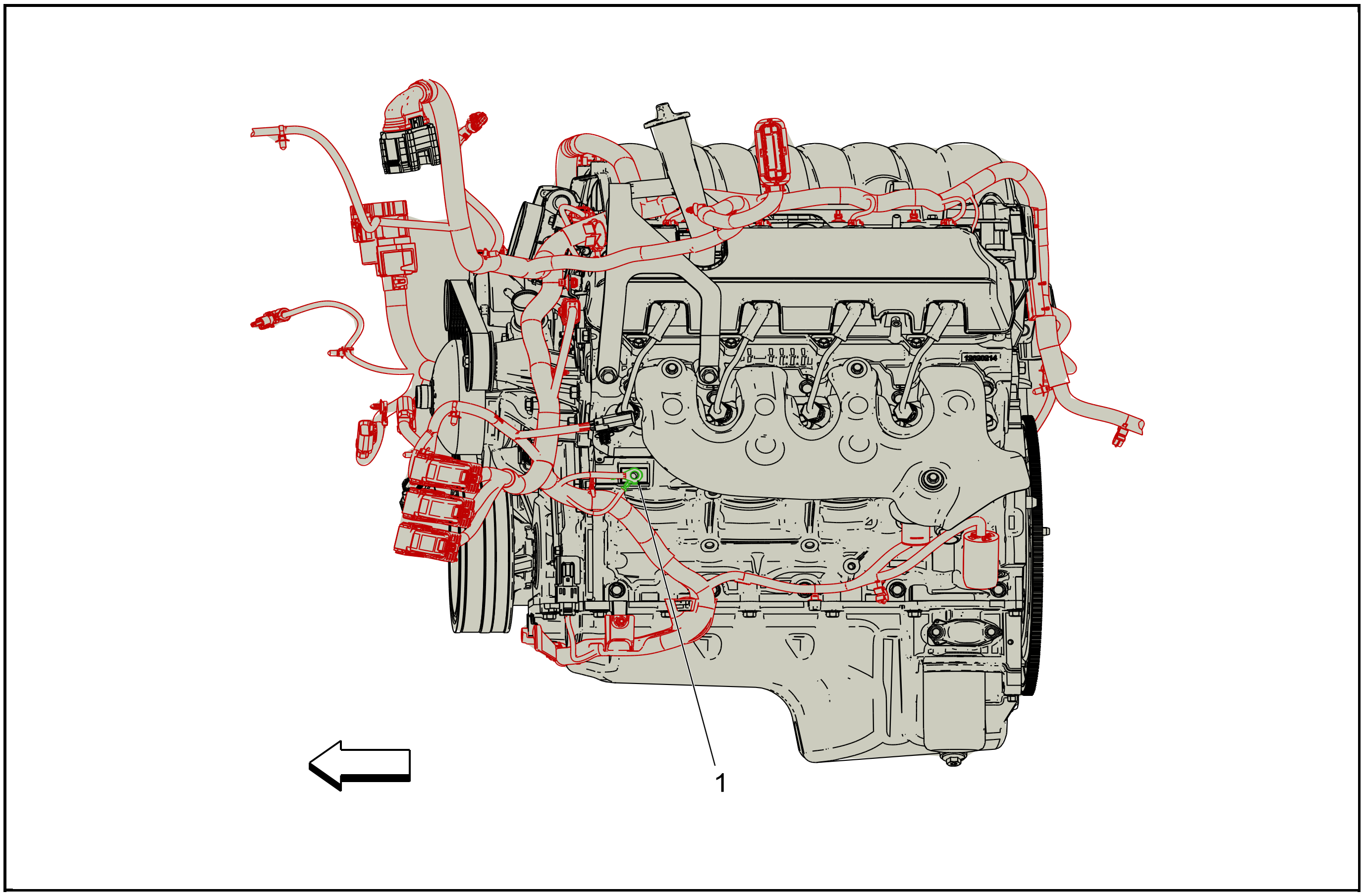


5034756

**Items**

| | |
|---|---|
| (1) | G117 Engine Harness |

## G117 (L82/L84/L87)

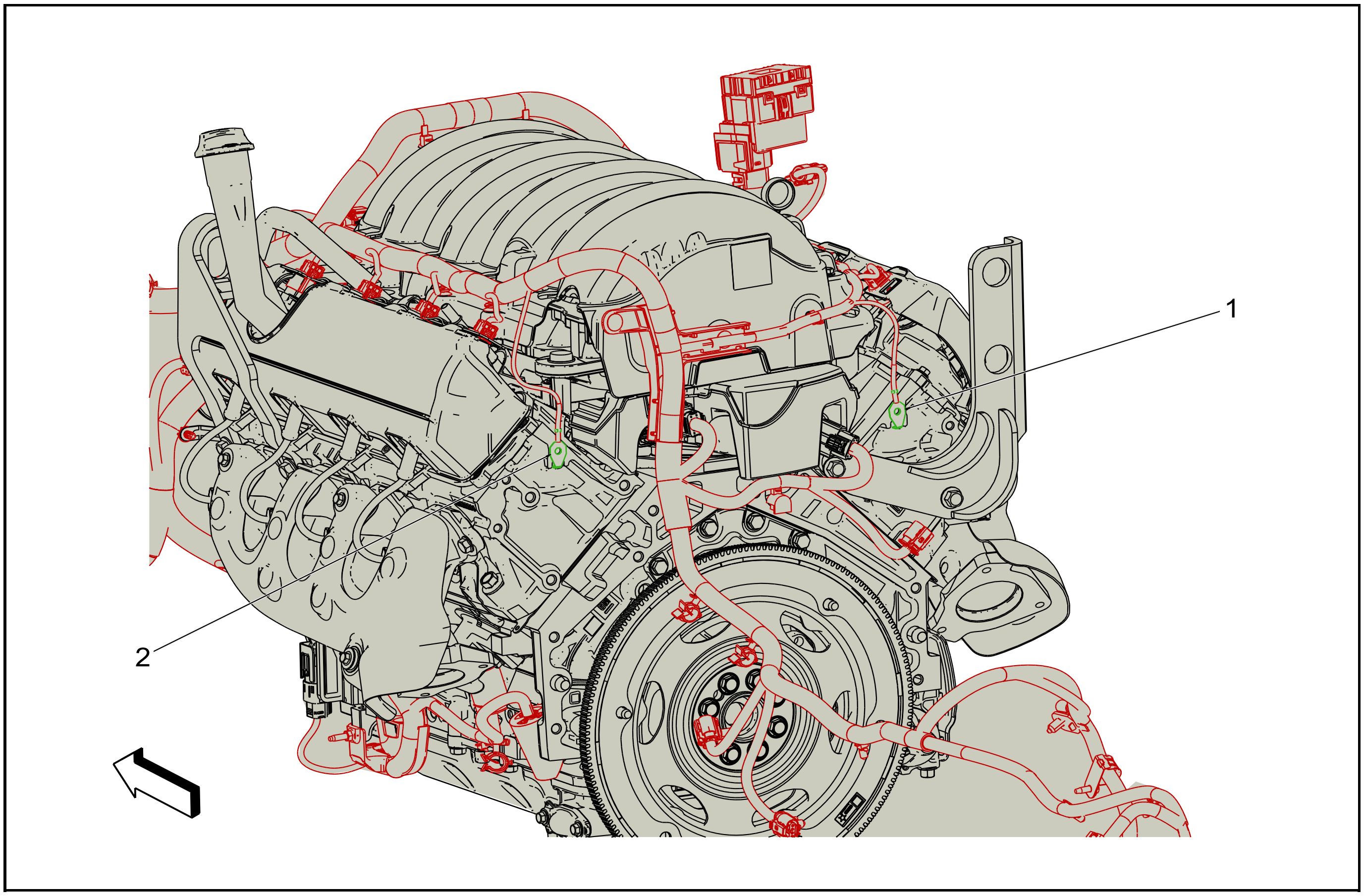


5034757

**Items**

(1) G117 Engine Harness

## G121 and G122 (L82/L84/L87)

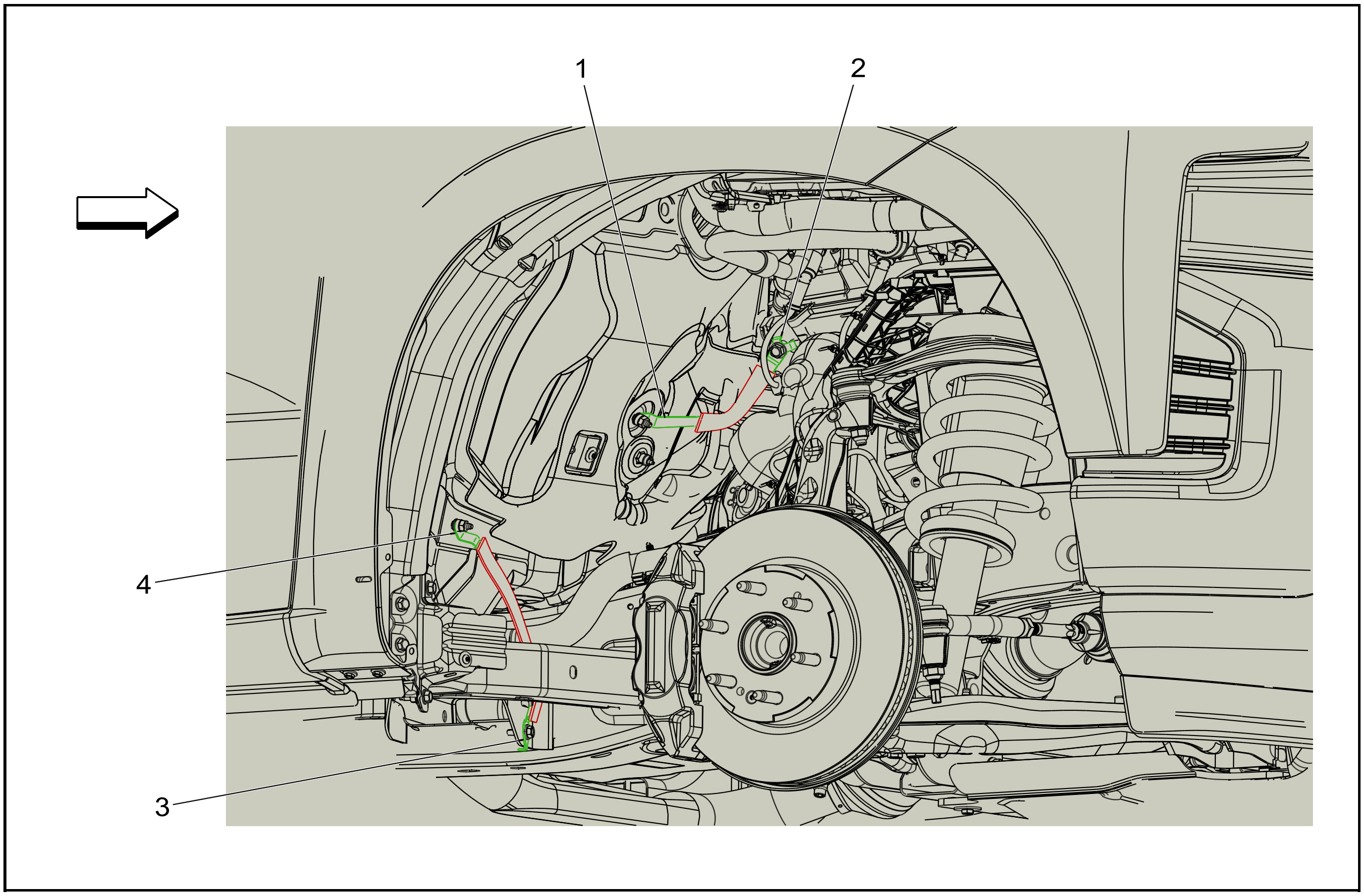


5034758

**Items**

| | |
|---|---|
| (1) | G122 Engine Harness |
| (2) | G121 Engine Harness |

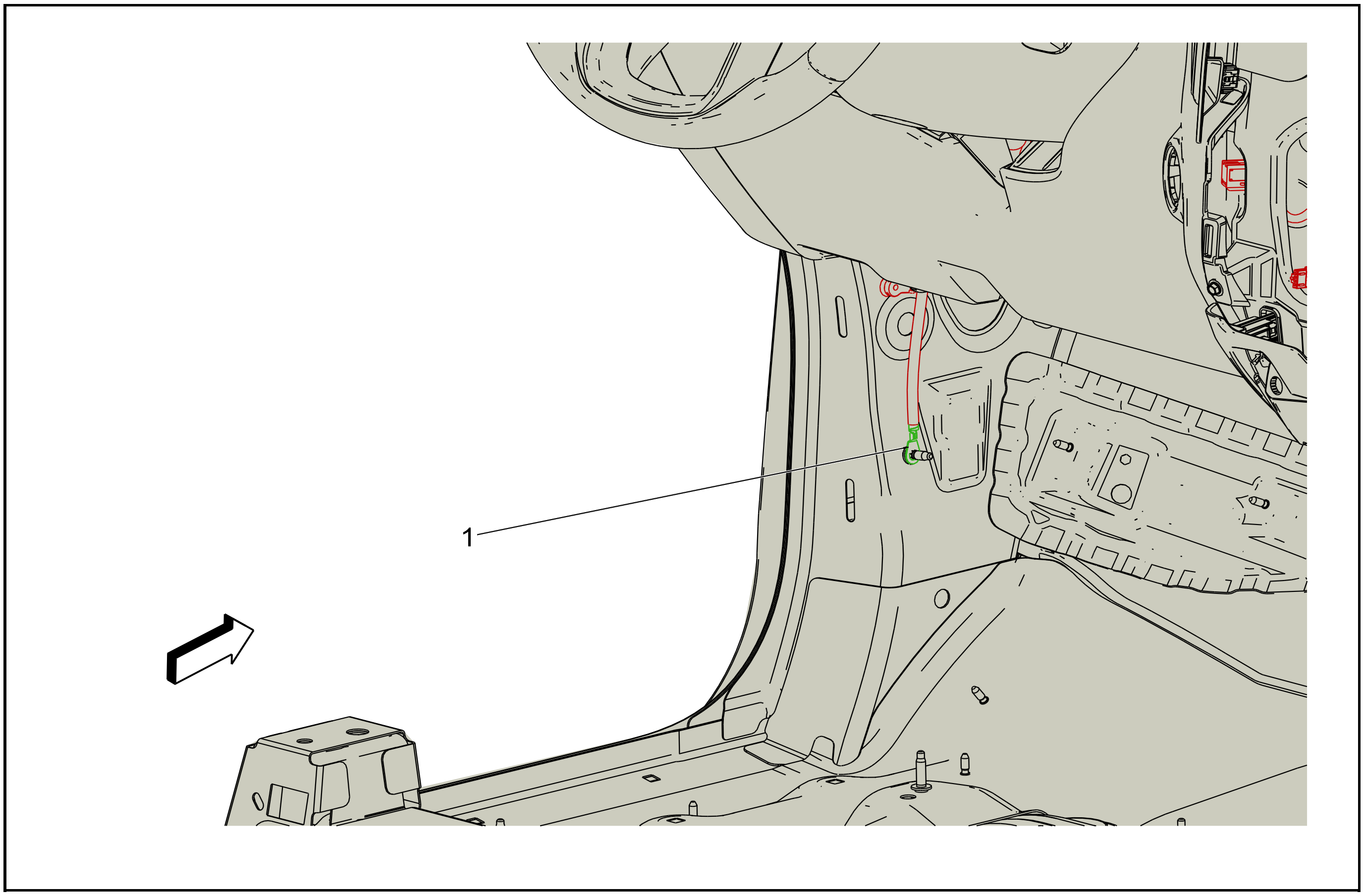
## G131, G132, G133, and G134



**Items**

| | |
|---|---|
| (1) | G132 Engine Ground Strap |
| (2) | G134 Engine Ground Strap |
| (3) | G131 Frame Ground Strap |
| (4) | G133 Frame Ground Strap |

## G200

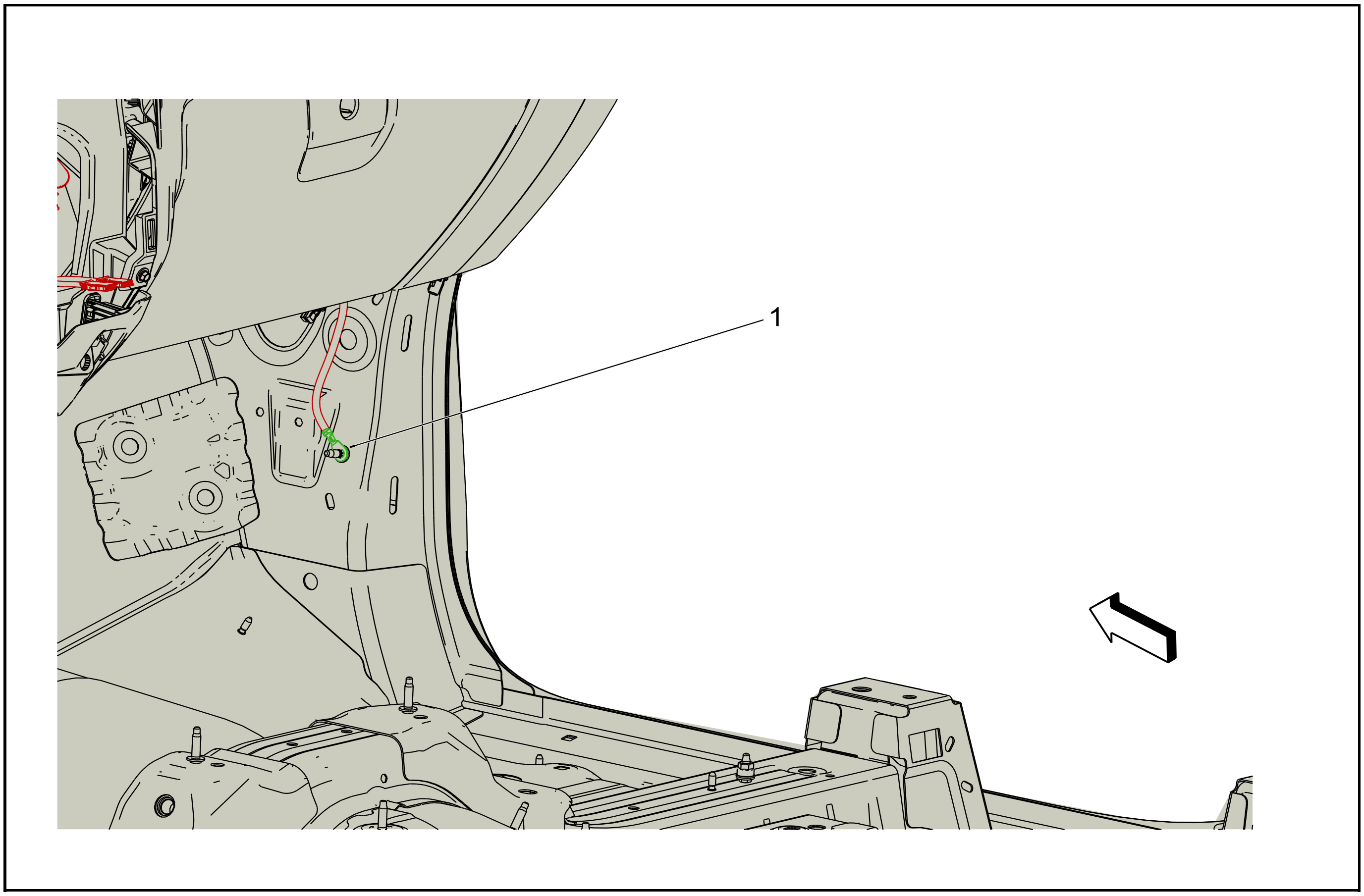


5034759

**Items**

| | |
|---|---|
| (1) | G200 Instrument Panel Harness |

# G220

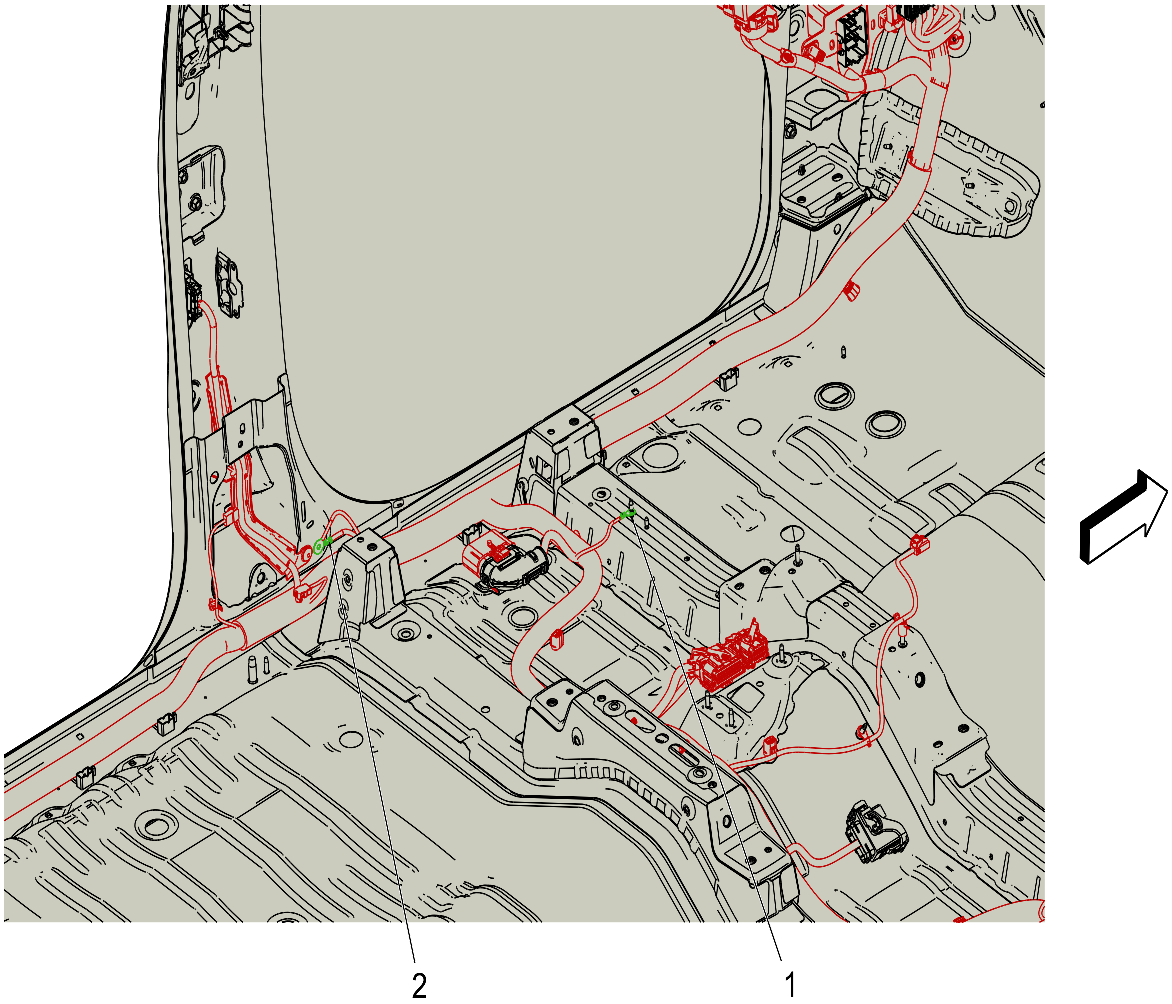


5034760

**Items**

(1) G220 Instrument Panel Harness

## G300 and G308



5023374

**Items**

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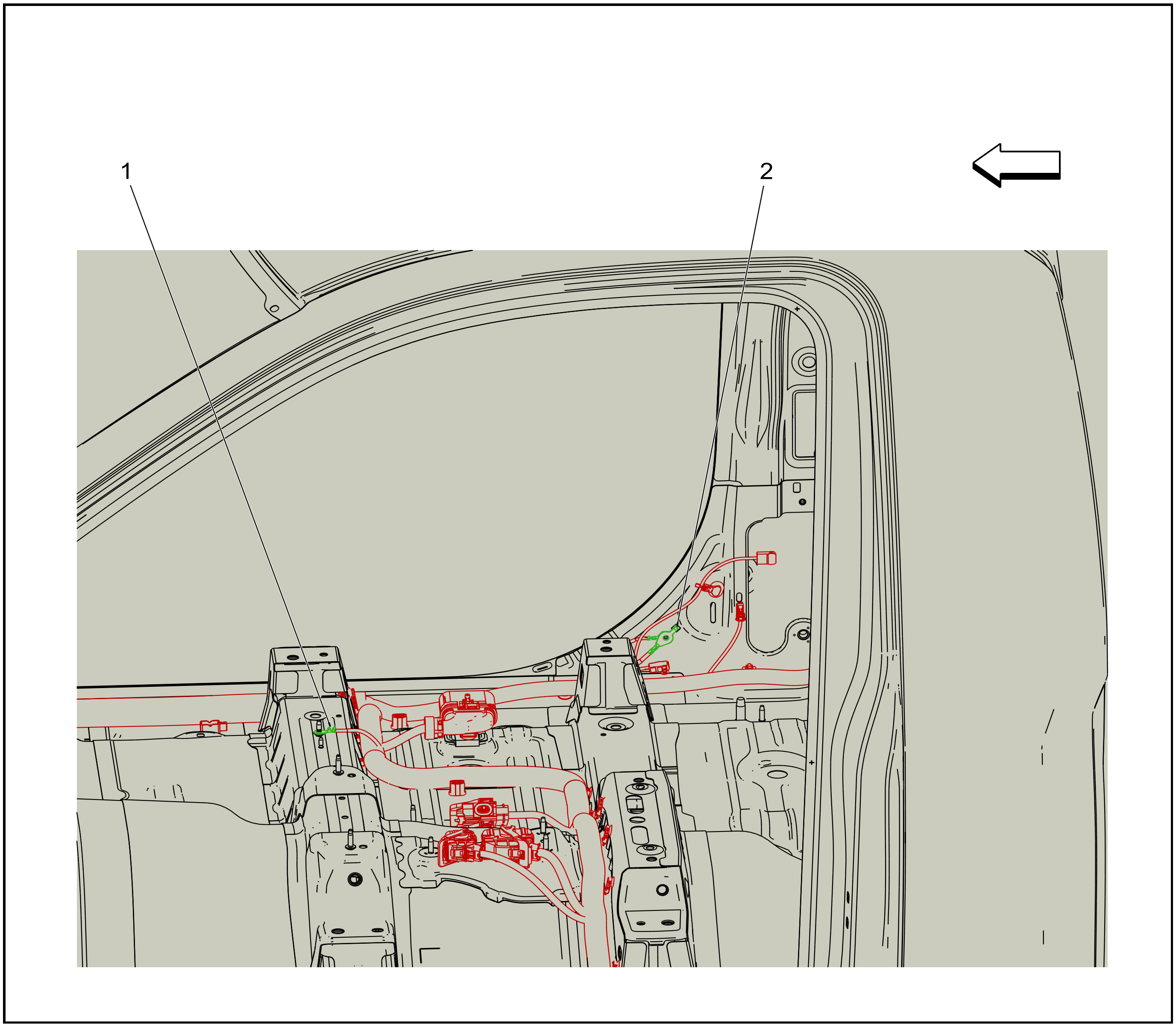
|---|---|
| (1) | G308 Body Harness |
| (2) | G300 Body Harness |

## G312 and G320

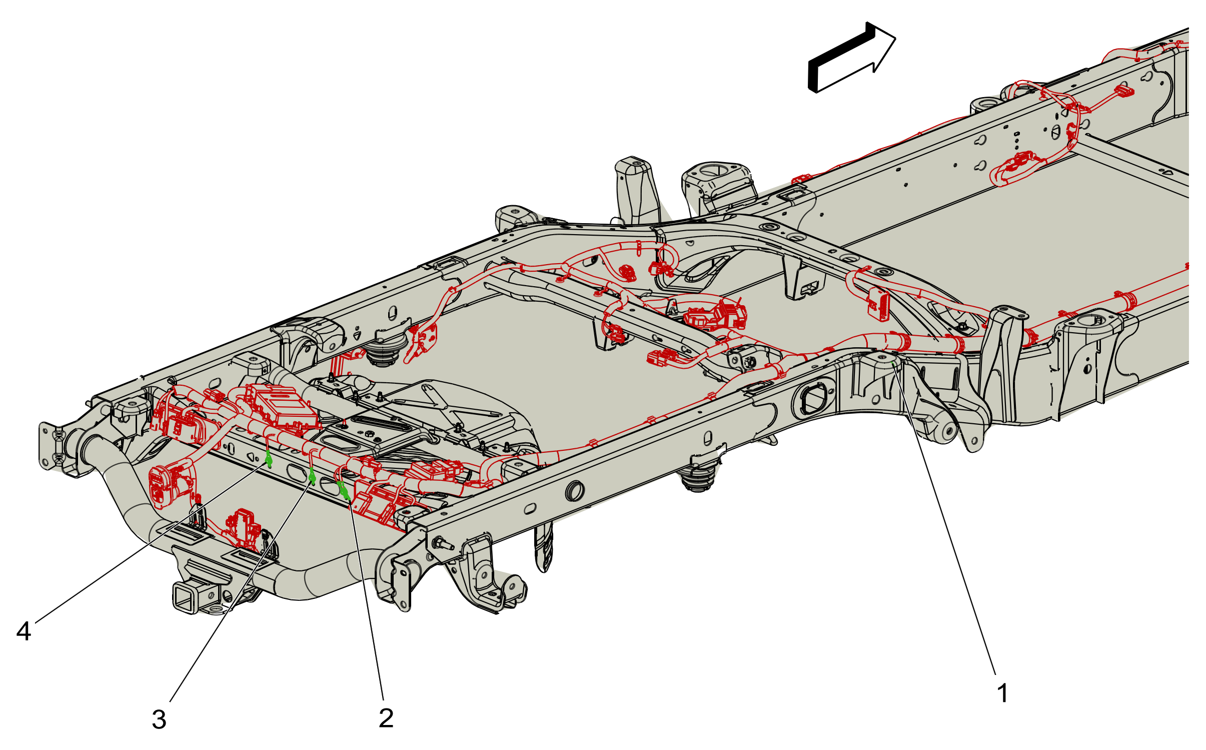


5023375

**Items**

| | |
|---|---|
| (1) | G312 Body Harness |
| (2) | G320 Body Harness |

## G322, G400, G405, and G415



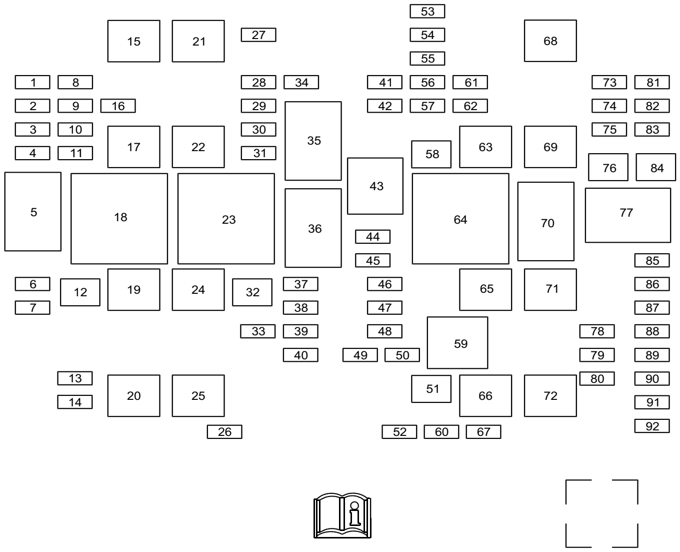
5002862

**Items**

| | |
|---|---|
| (1) | G322 Chassis Harness |
| (2) | G400 Chassis Harness |
| (3) | G405 Chassis Harness |
| (4) | G415 Chassis Harness |

# Electrical Center Identification Views

## X50A Fuse Block - Underhood Label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**FUSES**

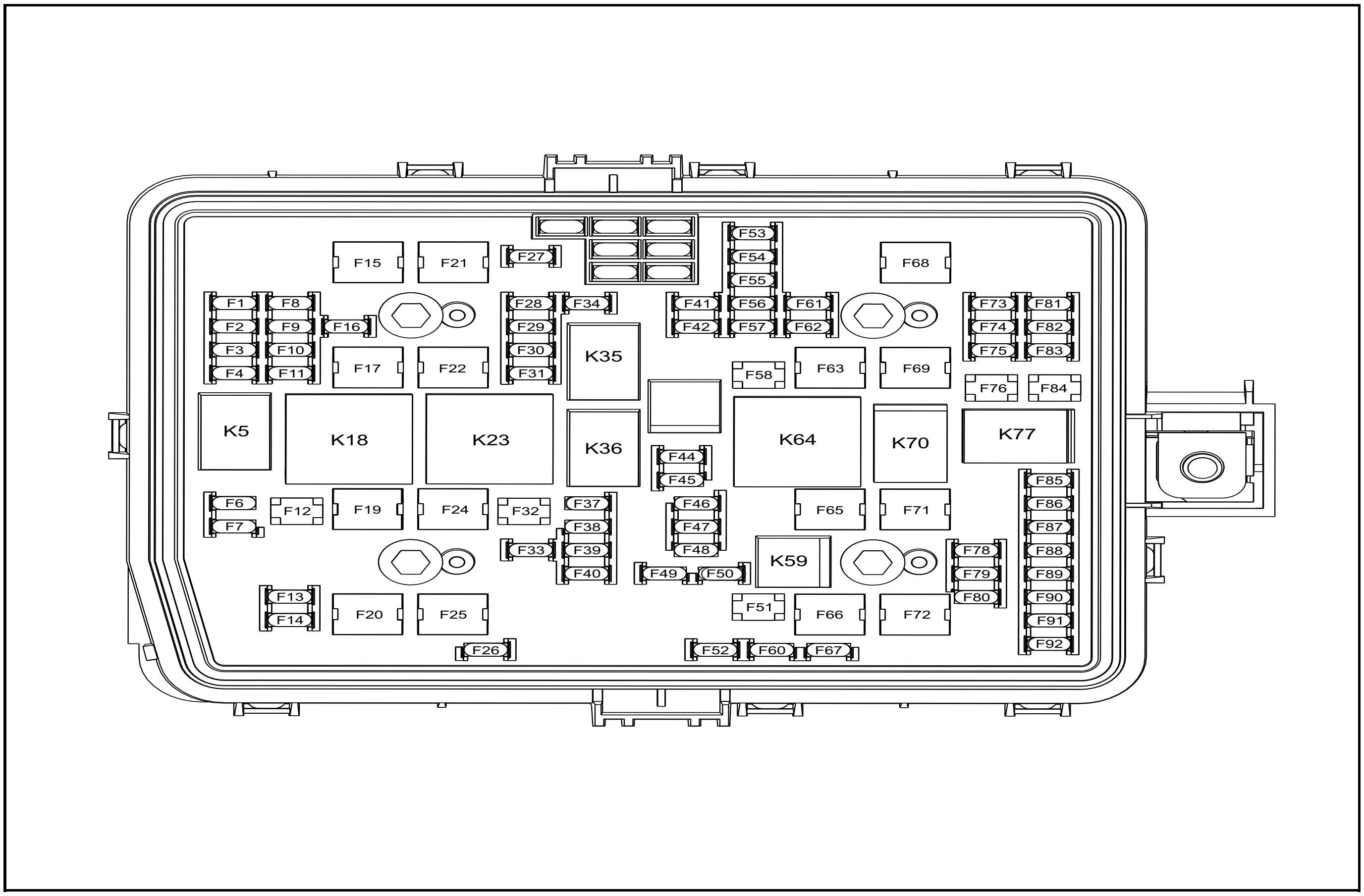
| | |
|---|---|
| 1 | HI BEAM LT (10A) |
| 2 | HI BEAM RT (10A) |
| 3 | HEAD LAMP LT (20A) |
| 4 | HEAD LAMP RT (20A) |
| 6 | TIM (25A) |
| 7 | SPARE (10A) |
| 8 | FOG LAMP (15A) |
| 9 | VKM (5A) |
| 10 | SPARE (10A) |
| 11 | POLICE UPFTR (10A) |
| 12 | SPARE (30A) |
| 13 | WSHR FRT (15A) |
| 14 | WSHR RR (15A) |
| 15 | MSB DRVR (40A) |
| 16 | SPARE (15A) |
| 17 | IECL 1 (60A) |
| 19 | DC/AC INV (60A) |
| 20 | IECR2 (60A) |
| 21 | MSB PASS (40A) |
| 22 | IECL 2 (60A) |
| 24 | EBOOST 1 (60A) |
| 25 | REC (60A) |
| 26 | SPARE (15A) |
| 27 | HORN (15A) |
| 28 | SPARE (15A) |
| 29 | SPARE (15A) |
| 30 | SPARE (15A) |
| 31 | SPARE (15A) |
| 32 | REAR DEFOG (30A) |
| 33 | HTD MIR (15A) |
| 34 | PRK LAMP LT (15A) |
| 37 | EURO TRLR CONN (20A) |
| 38 | TIM (10A) |
| 39 | SPARE (10A) |
| 40 | MISC IGN (10A) |
| 41 | TRLR PRK LAMP (20A) |
| 42 | PRK LAMP RT (15A) |
| 44 | SPARE (5A) |
| 45 | SECD FUEL PUMP (20A) |
| 46 | ECM IGN (15A) |
| 47 | TCM IGN (5A) |
| 48 | SPARE (10A) |
| 49 | TCM (15A) |
| 50 | A/C CLTCH (10A) |
| 51 | TCCM (30A) |
| 52 | FRT WPR (25A) |
| 53 | CHMSL (10A) |
| 54 | TRLR REV LAMP (10A) |
| 55 | TRLR BCK/UP LAMP (10A) |
| 56 | SADS (15A) |
| 57 | TTPM / SBZA (15A) |
| 58 | STRTR MTR (30A) LD |
| 60 | AFM1 (10A) |
| 61 | VES (5A) |
| 62 | ICCM / CVS (10A) |
| 63 | TRLR BATT (30A) |
| 65 | AUX UEC (60A) |
| 66 | COOL FAN MTR LT (50A) |
| 67 | AFM2 (10A) |
| 68 | TIM (40A) |
| 69 | STRTR MTR (30A) HD |
| 69 | STRTR PINION (40A) LD |
| 71 | MTR COOL PUMP (50A) |
| 72 | COOL FAN MTR RT / LWR (50A) |
| 73 | TRLR STP/TRN LAMP LT (10A) |
| 74 | TIM (20A) |
| 75 | DEFC (20A) |
| 76 | ELEC RNG BDS (30A) |
| 78 | ECM (15A) |
| 79 | AUX BATT / SCRPM (10A) |
| 80 | CABIN COOL PUMP 17W (10A) |
| 81 | TRLR STP/TRN LAMP RT (10A) |
| 82 | TIM (30A) |
| 83 | FTZM (25A) |
| 84 | TRLR BRK (30A) |
| 85 | ENG (15A) |
| 86 | ECM (30A) |
| 87 | INJ B EVEN (20A) |
| 88 | O2 B SNSR (15A) |
| 89 | O2 A SNSR (15A) |
| 90 | INJ A ODD (20A) |
| 91 | ECM THROT CONT (15A) |
| 92 | COOL FAN CLUTCH / AERO SHUTTER (10A) |

**RELAYS**

| | |
|---|---|
| 5 | HEAD LAMP |
| 18 | DC/AC INV |
| 23 | REAR DEFOG |
| 35 | PRK LAMP |
| 36 | RUN/CRNK |
| 43 | SECD FUEL PUMP |
| 59 | A/C CLTCH |
| 64 | COOL FAN CLUTCH HD |
| 64 | STRTR MTR LD |
| 70 | STRTR MTR HD |
| 70 | STRTR PINION LD |
| 77 | PWR/TRN |

5044140

## X50A Fuse Block - Underhood Top View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K77
5041384

## Usage Table

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| **Fuses** | | | | |
| F1 | HI BEAM LT | F1UA | 10A | • E13LA Headlamp Assembly - Left |
| F2 | HI BEAM RT | F2UA | 10A | • E13RA Headlamp Assembly - Right |
| F3 | HEAD LAMP LT | F3UA | 20A | • E13LA Headlamp Assembly - Left |
| F4 | HEAD LAMP RT | F4UA | 20A | • E13RA Headlamp Assembly - Right |
| F6 | TIM | F6UA | 25A | — |
| F7 | SPARE | F7UA | 10A | — |
| F8 | FOG LAMP | F8UA | 15A | • E29LF Fog Lamp - Left Front (T3U)<br>• E29RF Fog Lamp - Right Front (T3U) |
| F9 | VKM | F9UA | 5A | — |
| F10 | SPARE | F10UA | 10A | — |
| F11 | POLICE UPFTR | F11UA | 10A | — |
| F12 | SPARE | F12UA | 30A | — |
| F13 | WSHR FRT | F13UA | 15A | • G24 Windshield Washer Pump |
| F14 | WSHR RR | F14UA | 15A | — |
| F15 | MSB DRVR | F15UA | 40A | — |
| F16 | SPARE | F16UA | 15A | — |
| F17 | IECL 1 | F17UA | 60A | • X51L Fuse Block - Instrument Panel Left (KA1/QT5) |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F19 | DC/AC INV | F19UA | 60A | • T1 Accessory DC/AC Power Inverter Module (KI4/KI5) |
| F20 | IECR2 | F20UA | 60A | • X51R Fuse Block - Instrument Panel Right |
| F21 | MSB PASS | F21UA | 40A | — |
| F22 | IECL 2 | F22UA | 60A | • X51L Fuse Block - Instrument Panel Left (BTM/A48) |
| F24 | EBOOST 1 | F24UA | 60A | • K17 Electronic Brake Control Module<br>• X140 |
| F25 | REC | F25UA | 60A | — |
| F26 | SPARE | F26UA | 15A | — |
| F27 | HORN | F27UA | 15A | • P12 Horn |
| F28 | SPARE | F28UA | 15A | — |
| F29 | SPARE | F29UA | 15A | — |
| F30 | SPARE | F30UA | 15A | — |
| F31 | SPARE | F31UA | 15A | — |
| F32 | REAR DEFOG | F32UA | 30A | • E18 Rear Defogger Grid |
| F33 | HTD MIR | F33UA | 15A | • E17D Outside Rearview Mirror Glass - Driver (DLF/DEZ)<br>• E17P Outisde Rearview Mirror Glass - Passenger (DLF/DEZ) |
| F34 | PRK LAMP LT | F34UA | 15A | • E13LA Headlamp Assembly - Left<br>• E42L Tail Lamp Assembly - Left |
| F37 | EURO TRLR CONN | F37UA | 20A | — |
| F38 | TIM | F38UA | 10A | — |
| F39 | SPARE | F39UA | 10A | — |
| F40 | MISC IGN | F40UA | 10A | • X51B Fuse Block - Instrument Panel Auxiliary |
| F41 | TRLR PRK LAMP | F41UA | 20A | • X88 Trailer Connector (Z82-U1D) |
| F42 | PRK LAMP RT | F42UA | 15A | • E13RA Headlamp Assembly - Right<br>• E42R Tail Lamp Assembly - Right |
| F44 | SPARE | F44UA | 5A | — |
| F45 | SECO FUEL PUMP | F45UA | 20A | — |
| F46 | ECM IGN | F46UA | 15A | • K20 Engine Control Module<br>• K34 Glow Plug Control Module (LM2)<br>• K68 Trailer Lighting Control Module (U1D)<br>• K111 Fuel Pump Driver Control Module<br>• K115 Reductant Control Module (LM2)<br>• K160 Brake System Control Module |
| F47 | TCM IGN | F47UA | 5A | • M26 Front Axle Engagement Actuator (NP0/NQH)<br>• K71 Transmission Control Module (MQB/MQE)<br>• Q8 Control Solenoid Valve Assembly (MYC) |
| F48 | SPARE | F48UA | 10A | — |
| F49 | TCM IGN | F49UA | 15A | • T12 Automatic Transmission Assembly (MQB) |
| F50 | A/C CLTCH | F50UA | 10A | • Q2 A/C Compressor Clutch |
| F51 | TCCM | F51UA | 30A | • K69 Transfer Case Control Module (NP0/NQH) |
| F52 | FRT WPR | F52UA | 25A | • KR12B Windshield Wiper Relay<br>• KR12C Windshield Wiper Speed Control Relay |
| F53 | CHMSL | F53UA | 10A | • E6 Center High Mounted Stop Lamp |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F54 | TRLR REV LAMP | F54UA | 10A | • A10 Inside Rearview Mirror (DD8/DRZ)<br>• A11 Radio<br>• E42L Tail Lamp Assembly - Left<br>• E42R Tail Lamp Assembly - Right |
| F55 | TRLR BCK/UP LAMP | F55UA | 10A | • X88 Trailer Connector (Z82-U1D) |
| F56 | SADS | F56UA | 15A | • K19 Suspension Control Module (Z45) |
| F57 | TTPM/SBZA | F57UA | 15A | • B218L Side Object Sensor Module - Left (UKC)<br>• B218R Side Object Sensor Module - Right (UKC)<br>• K214 Trailer Tire Pressure Indicator Module (PTT) |
| F58 | STRTR MTR | F58UA | 30A | • KR27 Starter Relay |
| F60 | AFM1 | F60UA | 10A | • K20 Engine Control Module (L82/L84/L87) |
| F61 | VES | F61UA | 5A | — |
| F62 | ICCM/CVS | F62UA | 10A | • Q13 Evaporative Emission Vent Solenoid Valve (-LM2) |
| F63 | TRLR BATT | F63UA | 30A | • X88 Trailer Connector |
| F65 | AUX UEC | F65UA | 60A | • X50B Fuse Block - Underhood Auxiliary (LM2) |
| F66 | COOL FAN MTR LT | F66UA | 50A | • G10L Cooling Fan Motor - Left |
| F67 | AFM2 | F67UA | 10A | • K20 Engine Control Module (L82/L84/L87) |
| F68 | TIM | F68UA | 40A | — |
| F69 | STRTR PINION | F69UA | 40A | • KR27C Starter Pinion Solenoid Actuator Relay |
| F71 | MTR COOL PUMP | F71UA | 50A | • G10R Cooling Fan Motor - Right (L3B) |
| F72 | COOL FAN MTR RT/LWR | F72UA | 50A | • G10R Cooling Fan Motor - Right (L92/L84/L87/LV3)<br>• G10B Cooling Fan Motor - Lower (L3B/LM2) |
| F73 | TRLR STP/TRN LAMP LT | F73UA | 10A | • X88 Trailer Connector (Z82-U1D) |
| F74 | TIM | F74UA | 20A | • K101 Trailer Interface Control Module (LM2) |
| F75 | DEFC | F75UA | 20A | • K115 Reductant Control Module (LM2) |
| F76 | ELEC RNG BOS | F76UA | 30A | • K4 Assist Step Control Module (BRS) |
| F78 | ECM | F78UA | 15A | • K20 Engine Control Module |
| F79 | AUX BATT/ SCRPM | F79UA | 10A | — |
| F80 | CABIN COOL PUMP 17W | F80UA | 10A | • G17 Heater Coolant Pump (LM2)<br>• KR33 Auxiliary Heater Coolant Pump Relay (L84/L87) |
| F81 | TRLR STP/TRN LAMP RT | F81UA | 10A | • X88 Trailer Connector (Z82-U1D) |
| F82 | TIM | F82UA | 30A | • K68 Trailer Lighting Control Module (U1D) |
| F83 | FTZM | F83UA | 25A | • K111 Fuel Pump Driver Control Module |
| F84 | TRLR BRK | F84UA | 30A | • K133 Trailer Brake Power Control Module (JL1)<br>• W24 Blunt Cut - Trailer Brakes Provision |
| F85 | ENG | F85UA | 15A | • B75C Multifunction Intake Air Sensor (L3B/LM2/LV3)<br>• K20 Engine Control Module (L3B)<br>• Q97 Engine Coolant Flow Control Valve (L3B) |
| F86 | ECM | F86UA | 30A | • K20 Engine Control Module |

## Usage Table (cont'd)

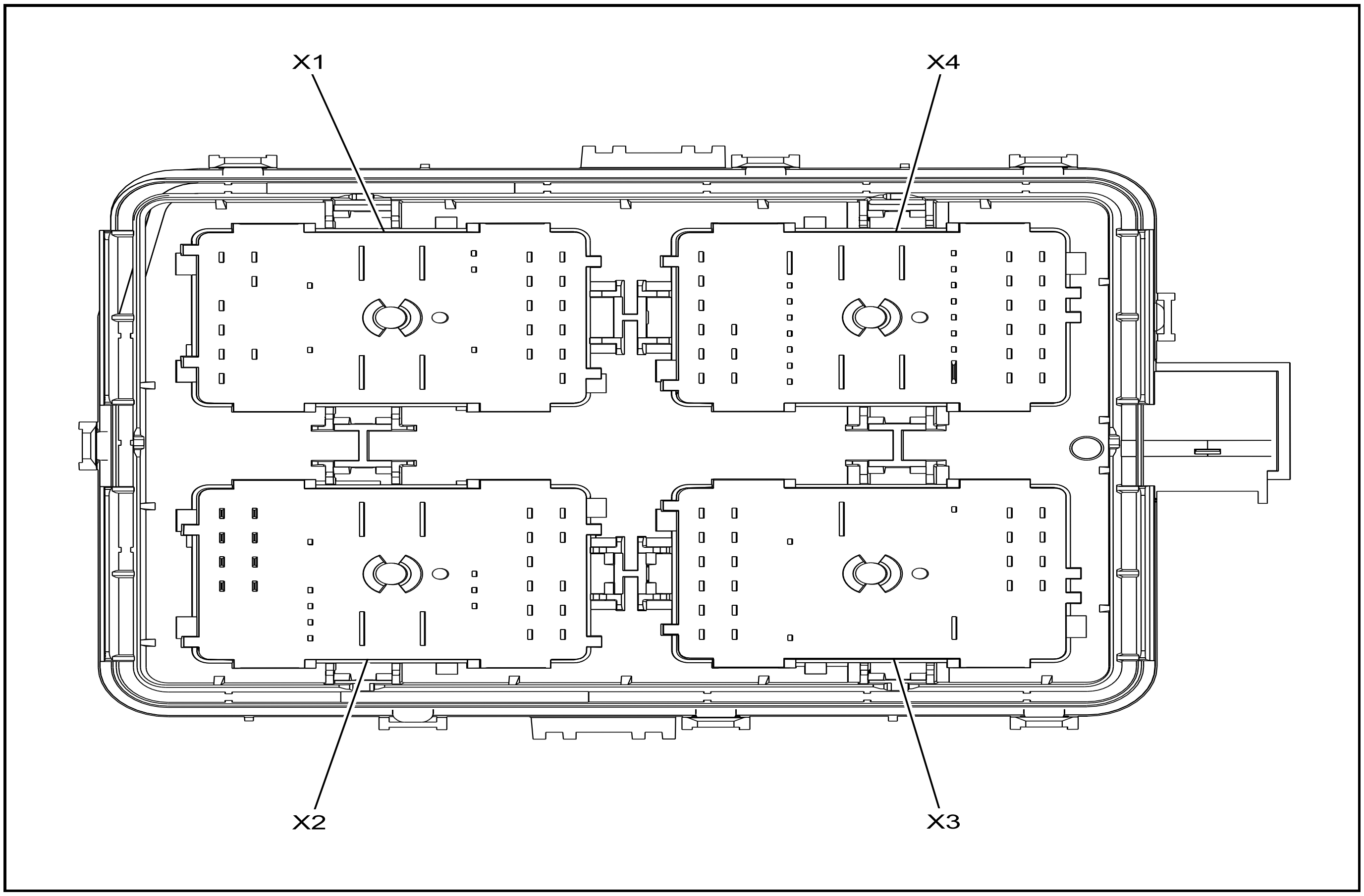
| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F87 | INJ B EVEN | F87UA | 20A | • K20 Engine Control Module<br>• T8B Ignition Coil 2 (L82/L84/L87/LV3)<br>• T8D Ignition Coil 4 (L82/L84/L87/LV3)<br>• T8F Ignition Coil 6 (L82/L84/L87/LV3)<br>• T8H Ignition Coil 8 (L82/L84/L87) |
| F88 | O2 B SNSR | F88UA | 15A | • B52B Heated Oxygen Sensor 2 (L3B)<br>• B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/L87)<br>• B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87)<br>• B75C Multifunction Intake Air Sensor (L82/L84/L87)<br>• B198 Fuel Composition Sensor (FHS)<br>• K20 Engine Control Module (L82/L84/L87/LV3)<br>• Engine Coolant Pump Relay (LM2) |
| F89 | O2 A SNSR | F89UA | 15A | • B52A Heated Oxygen Sensor 1 (L3B)<br>• B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/L87/LV3)<br>• B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LV3)<br>• B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/L87/LV3)<br>• B52F Heated Oxygen Sensor Bank 2 Sensor 2 (LV3)<br>• G58 Evaporative Emission Purge Pump (L3B)<br>• M129A Intake Camshaft Porfile Actuator 1 (L3B)<br>• M129B Intake Camshaft Profile Actuator 2 (L3B)<br>• M129C Intake Camshaft Profile Actuator 3 (L3B)<br>• M129D Intake Camshaft Profile Actuator 4 (L3B)<br>• M130A Exhaust Camshaft Profile Actuator 1 (L3B)<br>• M130B Exhaust Camshaft Profile Actuator 2 (L3B)<br>• Q12 Evaporative Emission Purge Solenoid Valve (-LM2)<br>• Q40 Turbocharger Bypass Solenoid Valve (L3B)<br>• Q43 Valve Lifter Oil Manifold Assembly (LV3)<br>• Q44 Engine Oil Pressure Control Solenoid Valve (L82/L84/L87/LV3)<br>• Q97B Engine Coolant Flow Control Valve - Block (LM2) |
| F90 | INJ A ODD | F90UA | 20A | • K20 Engine Control Module<br>• T8A Ignition Coil 1<br>• T8B Ignition Coil 2 (L3B)<br>• T8C Ignition Coil 3<br>• T8D Ignition Coil 4 (L3B)<br>• T8E Ignition Coil 5 (-L3B)<br>• T8G Ignition Coil 7 (-L3B-LV3) |
| F91 | ECM THROT CONT | F91UA | 15A | • K20 Engine Control Module (L82/L84/L87/LV3) |
| F92 | COOL FAN CLUTCH/AERO SHUTTER | F92UA | 10A | • M96A Active Grille Air Shutter 1 Actuator<br>• M96B Active Grille Air Shutter 2 Actuator (WMI) |
| **Relays** | | | | |
| K5 | HEAD LAMP | KR50 Headlamp Relay | — | • F3UA<br>• F4UA |
| K18 | DC/AC INV | KR80 Accessory Relay | — | • F19UA (KI4/KI5) |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| K23 | REAR DEFOG | KR5 Rear Defogger Relay | — | • F32UA<br>• F33UA |
| K35 | PRK LAMP | KR53 Park Lamps Relay | — | • F34UA<br>• F41UA<br>• F42UA |
| K36 | RUN/CRNK | KR73 Ignition Main Relay | — | • F37UA<br>• F38UA<br>• F39UA<br>• F40UA<br>• F44UA<br>• F46UA<br>• F47UA<br>• F48UA |
| K43 | SECD FUEL PUMP | — | — | — |
| K59 | A/C CLTCH | KR29 A/C Compressor Clutch Relay | — | • F50UA |
| K64 | STRTR MTR LD | KR27 Starter Motor | — | • M64 Starter Motor |
| K70 | STRTR PINION LD | KR27C Starter Pinion Solenoid Actuator Relay | — | • M64 Starter Motor (KL9) |
| K77 | PWR/TRN | KR75 Engine Controls Ignition Relay | — | • F60UA<br>• F67UA<br>• F85UA<br>• F86UA<br>• F87UA<br>• F88UA<br>• F89UA<br>• F90UA<br>• F91UA<br>• F92UA<br>• KR29 A/C Compressor Clutch Relay<br>• KR33 Auxiliary Heater Coolant Pump Relay |
| **Note: Relays listed below are non-serviceable Printed Circuit Board (PCB) relays and are internal to the block.** | | | | |
| — | — | KR3 Horn Relay | — | • F27UA |
| — | — | KR6 Rear Window Washer Pump Relay | — | • F14UA |
| — | — | KR11 Windshield Washer Pump Relay | — | • F13UA |
| — | — | KR12B Windshield Wiper Relay | — | • M75 Windshield Wiper Motor |
| — | — | KR12C Windshield Wiper Speed Control Relay | — | • M75 Windshield Wiper Motor |
| — | — | KR33 Auxiliary Heater Coolant Pump | — | • G17 Heater Coolant Pump (KL9) |
| — | — | KR46 Front Fog Lamp Relay | — | • F8UA |
| — | — | KR48 Headlamp High Beam Relay | — | • F1UA<br>• F2UA |

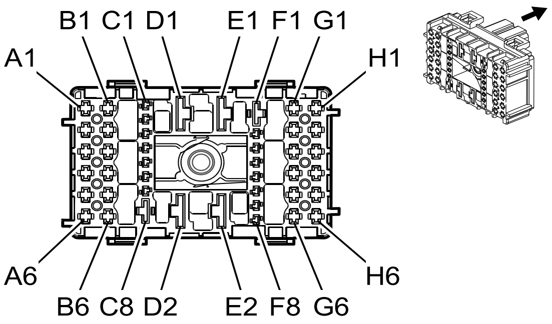
## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| — | — | KR53 Park Lamps Relay | — | • F34UA<br>• F41UA<br>• F42UA |
| — | — | KR59 Stop Lamp Relay | — | • F53UA |
| — | — | KR61 Trailer Back-up Lamps Relay | — | • F54UA<br>• F55UA |
| — | — | KR63L Trailer Stop/Turn Signal Lamp Relay - Left | — | • F73UA |
| — | — | KR63R Trailer Stop/Turn Signal Lamp Relay - Right | — | • F81UA |



5041382

# X50A Fuse Block - Underhood X1 (Regular Cab)



4994109

## Connector Part Information

Harness Type: Body
OEM Connector: 33295853
Service Connector: 19371175
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series (GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13582286 | J-35616-35 (VT) | J-38125-557 | 1241390-1 | Lear 17 | F | D |
| II | 19332365 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | Not Required | J-35616-22 (RD) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

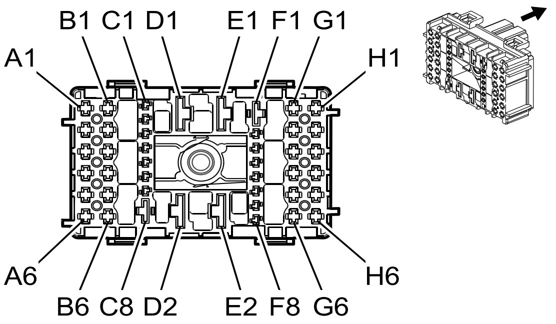
## X50A Fuse Block - Underhood X1 (Regular Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 - A2 | — | — | — | Not Occupied | — | — |
| A3 | 0.5 | YE/BN | 2229 | Left Headlamp Relay Control | III | — |
| A4 | 0.5 | BK | 250 | Ground | III | — |
| A5 - B4 | — | — | — | Not Occupied | — | — |
| B5 | 0.5 | GY/VT | 228 | Windshield Washer Pump Control | III | — |
| B6 - C2 | — | — | — | Not Occupied | — | — |
| C3 | 0.35 | WH/GN | 4628 | DC/AC Inverter Relay Control | II | — |
| C4 - C6 | — | — | — | Not Occupied | — | — |
| C7 | 0.35 | BN/GY | 2268 | Windshield Washer Relay Control | II | — |
| C8 | — | — | — | Not Occupied | — | — |
| D1 | 10 | RD/GY | 4629 | DC/AC Inverter Control | IV | — |
| D2 | 6 | RD/WH | 342 | Battery Positive Voltage | IV | — |
| E1 - F1 | — | — | — | Not Occupied | — | — |
| F2 | 0.5 | BN/VT | 193 | Rear Defog Relay Control | II | — |
| F3 - F5 | — | — | — | Not Occupied | — | — |
| F6 | 0.35 | WH/VT | 860 | Front Windshield Wiper Switch High Signal | II | — |

## X50A Fuse Block - Underhood X1 (Regular Cab) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| F7 - G1 | — | — | — | Not Occupied | — | — |
| G2 | 2.5 | BN/VT | 293 | Rear Defog Element Control | III | — |
| G3 | 0.5 | BN/YE | 2267 | Mirror Heating Element Control | III | — |
| G4 | 0.35 | GN/VT | 5199 | Run/Crank Relay Coil Control | III | — |
| G5 | 2 | BK | 150 | Ground | I | — |
| G6 | 0.35 | GY | 91 | Windshield Wiper Motor Relay Coil Control | III | — |
| H1 - H3 | — | — | — | Not Occupied | — | — |
| H4 | 0.35 | VT/WH | 239 | Run/Crank Ignition 1 Voltage | III | — |
| H5 | 2 | WH | 92 | Windshield Wiper Motor High Speed Control | III | — |
| H6 | 2 | YE/BN | 95 | Windshield Wiper Motor Low Speed Control | III | — |

# X50A Fuse Block - Underhood X1 (Crew Cab/Extended Cab)



4994109

## Connector Part Information

Harness Type: Body
OEM Connector: 33384590
Service Connector: 19370824
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series (BU)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19332365 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | Not Required | J-35616-22 (RD) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

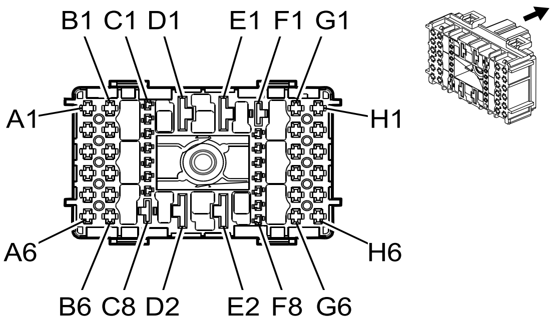
## X50A Fuse Block - Underhood X1 (Crew Cab/Extended Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 - A2 | — | — | — | Not Occupied | — | — |
| A3 | 0.5 | YE/BN | 2229 | Left Headlamp Relay Control | II | — |
| A4 | 0.5 | BK | 250 | Ground | II | — |
| A5 - B4 | — | — | — | Not Occupied | — | — |
| B5 | 0.5 | GY/VT | 228 | Windshield Washer Pump Control | II | — |
| B6 - C2 | — | — | — | Not Occupied | — | — |
| C3 | 0.35 | WH/GN | 4628 | DC/AC Inverter Relay Control | I | — |
| C4 - C6 | — | — | — | Not Occupied | — | — |
| C7 | 0.35 | BN/GY | 2268 | Windshield Washer Relay Control | I | — |
| C8 | — | — | — | Not Occupied | — | — |
| D1 | 10 | BN/BK | 4629 | DC/AC Inverter Control | III | — |
| D2 | 10<br>6 | RD/WH<br>RD/WH | 342<br>342 | Battery Positive Voltage<br>Battery Positive Voltage | III<br>III | CREW CAB<br>EXTENDED CAB |
| E1 | 10 | RD/YE | 442 | Battery Positive Voltage | III | — |
| E2 - F1 | — | — | — | Not Occupied | — | — |
| F2 | 0.5 | BN/VT | 193 | Rear Defog Relay Control | I | — |
| F3 - F5 | — | — | — | Not Occupied | — | — |

## X50A Fuse Block - Underhood X1 (Crew Cab/Extended Cab) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| F6 | 0.35 | WH/VT | 860 | Front Windshield Wiper Switch High Signal | I | — |
| F7 - G1 | — | — | — | Not Occupied | — | — |
| G2 | 2.5 | BN/VT | 293 | Rear Defog Element Control | II | — |
| G3 | 0.5 | BN/YE | 2267 | Mirror Heating Element Control | II | — |
| G4 | 0.35 | GN/VT | 5199 | Run/Crank Relay Coil Control | II | — |
| G5 | 2 | BK | 150 | Ground | II | — |
| G6 | 0.35 | GY | 91 | Windshield Wiper Motor Relay Coil Control | II | — |
| H1 - H3 | — | — | — | Not Occupied | — | — |
| H4 | 0.35 | VT/WH | 239 | Run/Crank Ignition 1 Voltage | II | — |
| H5 | 2 | WH | 92 | Windshield Wiper Motor High Speed Control | II | — |
| H6 | 2 | YE/BN | 95 | Windshield Wiper Motor Low Speed Control | II | — |

## X50A Fuse Block - Underhood X2 (Regular Cab)



4994132

### Connector Part Information

Harness Type: Body
OEM Connector: 33295854
Service Connector: 19371174
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19332365 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | Not Required | J-35616-22 (RD) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

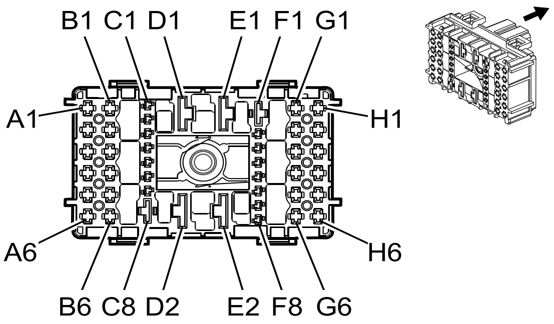
### X50A Fuse Block - Underhood X2 (Regular Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 - A2 | — | — | — | Not Occupied | — | — |
| A3 | 0.75 | WH | 711 | Left Headlamp High Beam Control | II | — |
| A4 | 0.75 | WH | 311 | Right Headlamp High Beam Control | II | — |
| A5 | 0.75 | YE | 2227 | Left Headlamp Control | II | — |
| A6 | 0.75 | YE/GY | 2226 | Right Headlamp Control | II | — |
| B1 - B2 | — | — | — | Not Occupied | — | — |
| B3 | 0.5 | BN/VT | 2234 | Front Fog Lamp Control | II | — |
| B4 - B6 | — | — | — | Not Occupied | — | — |
| C1 | 0.5 | BU/WH | 5186 | Left Trailer Turn Signal Lamp Control | I | — |
| C2 | 0.5 | YE/GY | 5187 | Right Trailer Turn Signal Lamp Control | I | — |
| C3 | 0.5 | BN/WH | 1317 | Fog Lamp Relay Control | I | — |
| C4 | 0.35 | BN/VT | 1969 | Headlamp High Beam Relay Control | I | — |
| C5 - D1 | — | — | — | Not Occupied | — | — |
| D2 | 10 | RD/GY | 2042 | Battery Positive Voltage | III | — |
| E1 | — | — | — | Not Occupied | — | — |
| E2 | 10 | RD/GY | 2142 | Battery Positive Voltage | III | — |
| F1 | — | — | — | Not Occupied | — | — |

## X50A Fuse Block - Underhood X2 (Regular Cab) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| F2 | 0.35<br>0.35 | VT/WH<br>VT/WH | 5065<br>5065 | Stop Lamp Relay Coil Control<br>Stop Lamp Relay Coil Control | I<br>I | REGULAR CAB<br>U1D |
| F3 | 0.35 | BU/BN | 38 | Backup Lamp Relay Control | I | — |
| F4 | 0.35 | BN/WH | 28 | Horn Relay Control | I | — |
| F5 - F8 | — | — | — | Not Occupied | — | — |
| G1 | 0.75 | BN/GY | 29 | Horn Control | II | — |
| G2 | 0.35 | GN/WH | 24 | Backup Lamp Control | II | — |
| G3 - G6 | — | — | — | Not Occupied | — | — |
| H1 | 0.35 | VT/GY | 1054 | Stop Lamp Control | II | — |
| H2 | — | — | — | Not Occupied | — | — |
| H3 | 0.5 | VT/GY | 709 | Left Park Lamp Control | II | — |
| H4 | — | — | — | Not Occupied | — | — |
| H5 | 0.5 | GY/BN | 309 | Right Park Lamp Control | II | — |
| H6 | 0.35 | BU | 45 | Park Lamp Relay Control | II | — |

# X50A Fuse Block - Underhood X2 (Crew Cab/Extended Cab)



4994132

## Connector Part Information

Harness Type: Body
OEM Connector: 33384594
Service Connector: 19371174
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series (GN)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19332365 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | Not Required | J-35616-22 (RD) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

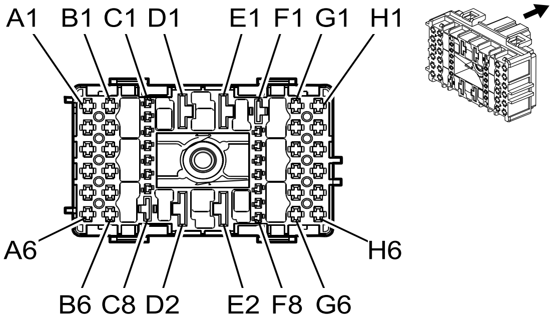
## X50A Fuse Block - Underhood X2 (Crew Cab/Extended Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 - A2 | — | — | — | Not Occupied | — | — |
| A3 | 0.75 | WH | 711 | Left Headlamp High Beam Control | II | — |
| A4 | 0.75 | WH | 311 | Right Headlamp High Beam Control | II | — |
| A5 | 0.75 | YE | 2227 | Left Headlamp Control | II | — |
| A6 | 0.75 | YE/GY | 2226 | Right Headlamp Control | II | — |
| B1 - B2 | — | — | — | Not Occupied | — | — |
| B3 | 0.5 | BN/VT | 2234 | Front Fog Lamp Control | II | — |
| B4 - B6 | — | — | — | Not Occupied | — | — |
| C1 | 0.5 | BU/WH | 5186 | Left Trailer Turn Signal Lamp Control | I | — |
| C2 | 0.5 | YE/GY | 5187 | Right Trailer Turn Signal Lamp Control | I | — |
| C3 | 0.5 | BN/WH | 1317 | Fog Lamp Relay Control | I | — |
| C4 | 0.35 | BN/VT | 1969 | Headlamp High Beam Relay Control | I | — |
| C5 - D1 | — | — | — | Not Occupied | — | — |
| D2 | 10 | RD/GY | 2042 | Battery Positive Voltage | III | — |
| E1 | — | — | — | Not Occupied | — | — |
| E2 | 10 | RD/VT | 2142 | Battery Positive Voltage | III | — |
| F1 | — | — | — | Not Occupied | — | — |

## X50A Fuse Block - Underhood X2 (Crew Cab/Extended Cab) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| F2 | 0.5 | VT/WH | 5065 | Stop Lamp Relay Coil Control | III | U1D |
| F3 | 0.35 | BU/BN | 38 | Backup Lamp Relay Control | I | — |
| F4 | 0.35 | BN/WH | 28 | Horn Relay Control | I | — |
| F5 - F8 | — | — | — | Not Occupied | — | — |
| G1 | 0.75 | BN/GY | 29 | Horn Control | II | — |
| G2 | 0.35 | GN/WH | 24 | Backup Lamp Control | II | — |
| G3 - H2 | — | — | — | Not Occupied | — | — |
| H3 | 0.5 | VT/GY | 709 | Left Park Lamp Control | II | — |
| H4 | — | — | — | Not Occupied | — | — |
| H5 | 0.5 | GY/BN | 309 | Right Park Lamp Control | II | — |
| H6 | 0.35 | BU | 45 | Park Lamp Relay Control | II | — |

# X50A Fuse Block - Underhood X3 (L3B)



4992608

## Connector Part Information

Harness Type: Engine
OEM Connector: Not Available
Service Connector: 19371176
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series (GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13579915 | J-35616-40 (BU) | J-38125-556 | Not Available | Not Available | Not Available | Not Available |
| II | 13582285 | J-35616-35 (VT) | J-38125-557 | 1241388-1 | Lear 17 | 2 | 4 |
| III | 13582285 | J-35616-35 (VT) | J-38125-557 | 1241388-1 | Lear 17 | E | C |
| IV | 13582286 | J-35616-35 (VT) | J-38125-557 | 1241390-1 | Lear 17 | F | D |
| V | 19332365 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VI | Not Required | J-35616-22 (RD) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

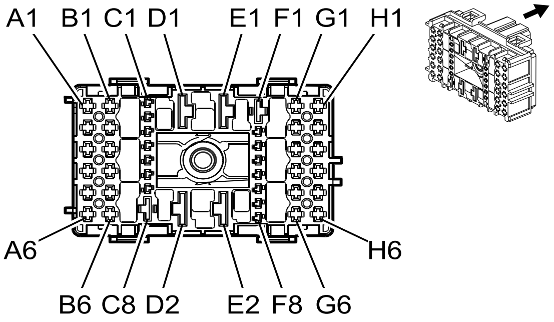
## X50A Fuse Block - Underhood X3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 | 0.5 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | III | — |
| A2 | 0.5<br>0.5 | VT/BK<br>VT/BK | 2139<br>2139 | Run/Crank Ignition 1 Voltage<br>Run/Crank Ignition 1 Voltage | III | —<br>NP0/NQH |
| A3 | — | — | — | Not Occupied | — | — |
| A4 | 0.5 | BN/GN | 59 | A/C Compressor Clutch Control | III | — |
| A5 - A6 | — | — | — | Not Occupied | — | — |
| B1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | IV | — |
| B2 | 0.5 | YE/BK | 625 | Starter Enable Relay Control | III | — |
| B3 - B5 | — | — | — | Not Occupied | — | — |
| B6 | 3 | RD/GY | 1342 | Battery Positive Voltage | IV | — |
| C1 - C2 | — | — | — | Not Occupied | — | — |
| C3 | 0.5 | BK | 4450 | Ground | V | — |
| C4 | 0.5 | WH/GY | 459 | A/C Compressor Clutch Relay Control | V | — |

## X50A Fuse Block - Underhood X3 (L3B) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| C5 - D1 | — | — | — | Not Occupied | — | — |
| D2 | 10 | RD/WH | 342 | Battery Positive Voltage | VI | — |
| E1 | 10 | RD | 642 | Battery Positive Voltage | VI | — |
| E2 | 10 | RD/VT | 842 | Battery Positive Voltage | VI | — |
| F1 | 2.5 | YE/GN | 4358 | Starter Pinion Solenoid Voltage | I | — |
| F2 | 0.5 | YE/VT | 4325 | Starter Pinion Solenoid Relay Control | V | — |
| F3 | 0.5 | RD/BN | 440 | Battery Positive Voltage | V | — |
| F4 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | V | — |
| F5 - F6 | — | — | — | Not Occupied | — | — |
| F7 | 0.5 | VT/BU | 5705 | Powertrain Main Relay Fused Control 6 | V | — |
| F8 | — | — | — | Not Occupied | — | — |
| G1 | 0.5 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | III | — |
| G2 - G3 | — | — | — | Not Occupied | — | — |
| G4 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | III | — |
| G5 | 1 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | II | — |
| G6 | — | — | — | Not Occupied | — | — |
| H1 | 2 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | IV | — |
| H2 | 2 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | IV | — |
| H3 | 0.5 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | III | — |
| H4 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | III | — |
| H5 - H6 | — | — | — | Not Occupied | — | — |

## X50A Fuse Block - Underhood X3 (L82)



4992608

### Connector Part Information

Harness Type: Engine

OEM Connector: 33384584

Service Connector: 19371176

Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series (GY)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13582286 | J-35616-35 (VT) | J-38125-557 | 1241390-1 | Lear 17 | F | D |
| II | 19332365 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | Not Required | J-35616-22 (RD) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

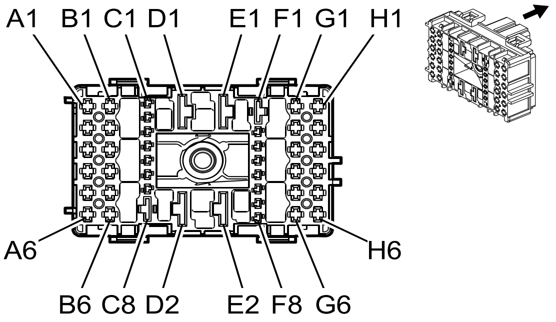
### X50A Fuse Block - Underhood X3 (L82)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 | 0.5 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | III | — |
| A2 | 0.5<br>0.5<br>0.5 | VT/BK<br>WH/GY<br>WH/GY | 2139<br>2139<br>2139 | Run/Crank Ignition 1 Voltage<br>Run/Crank Ignition 1 Voltage<br>Run/Crank Ignition 1 Voltage | III | MQB/MQE<br>MYC<br>NP0/NQH |
| A3 | — | — | — | Not Occupied | — | — |
| A4 | 0.5 | BN/GN | 59 | A/C Compressor Clutch Control | III | — |
| A5 - A6 | — | — | — | Not Occupied | — | — |
| B1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | I | — |
| B2 | 0.5 | YE/BK | 625 | Starter Enable Relay Control | III | — |
| B3 - B5 | — | — | — | Not Occupied | — | — |
| B6 | 3 | RD/GY | 1342 | Battery Positive Voltage | I | — |
| C1 - C2 | — | — | — | Not Occupied | — | — |
| C3 | 0.5 | BK | 4450 | Ground | II | — |
| C4 | 0.5 | WH/GY | 459 | A/C Compressor Clutch Relay Control | II | — |
| C5 | 0.5 | VT/YE | 3854 | Cabin Heater Coolant Motor Control | II | — |
| C6 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |

## X50A Fuse Block - Underhood X3 (L82) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| C7 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |
| C8 - D1 | — | — | — | Not Occupied | — | — |
| D2 | 5 | RD/WH | 342 | Battery Positive Voltage | IV | — |
| E1 | — | — | — | Not Occupied | — | — |
| E2 | 5 | RD/GY | 642 | Battery Positive Voltage | IV | — |
| F1 | — | — | — | Not Occupied | — | — |
| F2 | 0.5 | YE/VT | 4325 | Starter Pinion Solenoid Relay Control | II | — |
| F3 | 0.5 | RD/BN | 440 | Battery Positive Voltage | II | — |
| F4 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | II | — |
| F5 - G1 | — | — | — | Not Occupied | — | — |
| G2 | 0.75 | VT/BU | 5292 | Powertrain Main Relay Fused Supply 3 | III | — |
| G3 | — | — | — | Not Occupied | — | — |
| G4 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | III | — |
| G5 | 1 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | III | — |
| G6 | 0.75 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | III | — |
| H1 | 2 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | I | — |
| H2 | 1 | VT/BU | 5292 | Powertrain Main Relay Fused Supply 3 | III | — |
| H3 | 0.5 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | III | — |
| H4 - H5 | — | — | — | Not Occupied | — | — |
| H6 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | III | — |

# X50A Fuse Block - Underhood X3 (L3B/L82/L84/L87)



4992608

## Connector Part Information

Harness Type: Engine
OEM Connector: 33384584
Service Connector: 19371176
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series (GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13579915 | J-35616-40 (BU) | J-38125-556 | Not Available | Not Available | Not Available | Not Available |
| II | 13582286 | J-35616-35 (VT) | J-38125-557 | 1241390-1 | Lear 17 | F | D |
| III | 19332365 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| V | Not Required | J-35616-22 (RD) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

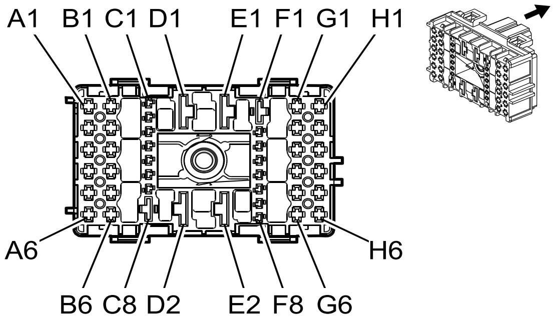
## X50A Fuse Block - Underhood X3 (L3B/L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 | 0.5 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | IV | — |
| A2 | 0.5<br>0.5 | VT/BK<br>VT/BK | 2139<br>2139 | Run/Crank Ignition 1 Voltage<br>Run/Crank Ignition 1 Voltage | IV | —<br>NP0/NQH |
| A3 | — | — | — | Not Occupied | — | — |
| A4 | 0.5 | BN/GN | 59 | A/C Compressor Clutch Control | IV | — |
| A5 | 0.75 | RD/VT | 7940 | Battery Positive Voltage | IV | — |
| A6 | — | — | — | Not Occupied | — | — |
| B1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | II | — |
| B2 | 0.5 | YE/BK | 625 | Starter Enable Relay Control | IV | — |
| B3 - B5 | — | — | — | Not Occupied | — | — |
| B6 | 3 | RD/GY | 1342 | Battery Positive Voltage | II | — |
| C1 - C2 | — | — | — | Not Occupied | — | — |
| C3 | 1 | BK | 4450 | Ground | III | — |
| C4 | 0.5 | WH/GY | 459 | A/C Compressor Clutch Relay Control | III | — |

## X50A Fuse Block - Underhood X3 (L3B/L82/L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| C5 | 0.5 | VT/YE | 3854 | Cabin Heater Coolant Motor Control | III | — |
| C6 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | III | — |
| C7 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | III | — |
| C8 - D1 | — | — | — | Not Occupied | — | — |
| D2 | 10 | RD/WH | 342 | Battery Positive Voltage | V | — |
| E1 | — | — | — | Not Occupied | — | — |
| E2 | 10 | RD/GY | 642 | Battery Positive Voltage | V | — |
| F1 | 2.5 | YE/GN | 4358 | Starter Pinion Solenoid Voltage | I | — |
| F2 | 0.5 | YE/VT | 4325 | Starter Pinion Solenoid Relay Control | III | — |
| F3 | 0.5 | RD/BN | 440 | Battery Positive Voltage | III | — |
| F4 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | III | — |
| F5 - F6 | — | — | — | Not Occupied | — | — |
| F7 | 0.5 | VT/BU | 5705 | Powertrain Main Relay Fused Control 6 | III | — |
| F8 | 0.5 | YE/BU | 5126 | After Boil Heater Pump Control | III | — |
| G1 | — | — | — | Not Occupied | — | — |
| G2 | 0.75 | VT/BU | 5292 | Powertrain Main Relay Fused Supply 3 | IV | — |
| G3 | — | — | — | Not Occupied | — | — |
| G4 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | IV | — |
| G5 | 1 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | IV | — |
| G6 | 0.75 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | IV | — |
| H1 | 2 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |
| H2 | 1 | VT/BU | 5292 | Powertrain Main Relay Fused Supply 3 | IV | — |
| H3 | 0.5 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | IV | — |
| H4 - H5 | — | — | — | Not Occupied | — | — |
| H6 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | IV | — |

# X50A Fuse Block - Underhood X3 (LM2/LV3)



4992608

## Connector Part Information

Harness Type: Engine
OEM Connector: Not Available
Service Connector: 19371176
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series (GY)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13582285 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 13582285 | J-35616-35 (VT) | J-38125-557 | 1241388-1 | Lear 17 | E | C |
| III | 13582286 | J-35616-35 (VT) | J-38125-557 | 1241390-1 | Lear 17 | F | D |
| IV | 19332365 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| V | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VI | Not Required | J-35616-22 (RD) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

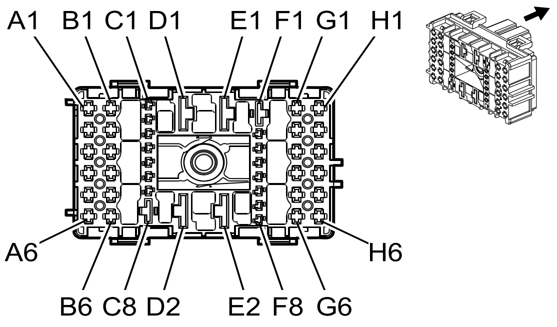
### X50A Fuse Block - Underhood X3 (LM2/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 | 0.5 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| A2 | 0.5<br>0.5 | VT/BK<br>VT/BK | 2139<br>2139 | Run/Crank Ignition 1 Voltage<br>Run/Crank Ignition 1 Voltage | V | —<br>NP0/NQH |
| A3 | — | — | — | Not Occupied | — | — |
| A4 | 0.5 | BN/GN | 59 | A/C Compressor Clutch Control | II | — |
| A5 | 0.75 | RD/VT | 7940 | Battery Positive Voltage | II | — |
| A6 | — | — | — | Not Occupied | — | — |
| B1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | III | — |
| B2 | 0.5 | YE/BK | 625 | Starter Enable Relay Control | II | — |
| B3 - B5 | — | — | — | Not Occupied | — | — |
| B6 | 3 | RD/GY | 1342 | Battery Positive Voltage | III | — |
| C1 - C2 | — | — | — | Not Occupied | — | — |
| C3 | 0.5 | BK | 4450 | Ground | IV | — |

## X50A Fuse Block - Underhood X3 (LM2/LV3) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| C4 | 0.5 | WH/GY | 459 | A/C Compressor Clutch Relay Control | IV | — |
| C5 - C8 | — | — | — | Not Occupied | — | — |
| D1 | 5 | RD/VT | 4040 | Battery Positive Voltage | VI | — |
| D2 | 10 | RD/WH | 342 | Battery Positive Voltage | VI | — |
| E1 - F2 | — | — | — | Not Occupied | — | — |
| F3 | 0.75 | RD/BN | 440 | Battery Positive Voltage | IV | — |
| F4 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | IV | — |
| F5 | — | — | — | Not Occupied | — | — |
| F6 | 0.5 | YE/BU | 5126 | After Boil Heater Pump Control | IV | — |
| F7 | 0.5 | VT/BU | 5705 | Powertrain Main Relay Fused Control 6 | IV | — |
| F8 | — | — | — | Not Occupied | — | — |
| G1 | 0.5 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | II | — |
| G2 | — | — | — | Not Occupied | — | — |
| G3 | 2.5 | VT/BU | 5292 | Powertrain Main Relay Fused Supply 3 | III | — |
| G4 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | II | — |
| G5 - G6 | — | — | — | Not Occupied | — | — |
| H1 | 2.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | III | — |
| H2 - H4 | — | — | — | Not Occupied | — | — |
| H5 | 4 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | I | — |
| H6 | — | — | — | Not Occupied | — | — |

# X50A Fuse Block - Underhood X3 (LV3)



4992608

## Connector Part Information

- Harness Type: Engine
- OEM Connector: 33384584
- Service Connector: 19371176
- Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series (GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13582285 | J-35616-35 (VT) | J-38125-557 | 1241388-1 | Lear 17 | 2 | 4 |
| II | 13582285 | J-35616-35 (VT) | J-38125-557 | 1241388-1 | Lear 17 | E | C |
| III | 13582286 | J-35616-35 (VT) | J-38125-557 | 1241390-1 | Lear 17 | C | A |
| IV | 13582286 | J-35616-35 (VT) | J-38125-557 | 1241390-1 | Lear 17 | F | D |
| V | 19332365 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VI | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VII | Not Required | J-35616-22 (RD) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

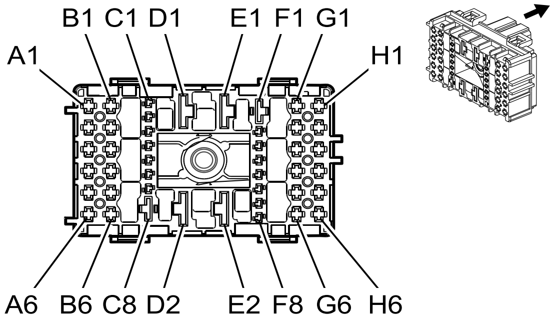
## X50A Fuse Block - Underhood X3 (LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 | 0.5 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| A2 | 0.5<br>0.5 | VT/BK<br>VT/BK | 2139<br>2139 | Run/Crank Ignition 1 Voltage<br>Run/Crank Ignition 1 Voltage | VI | —<br>NP0/NQH |
| A3 | — | — | — | Not Occupied | — | — |
| A4 | 0.5 | BN/GN | 59 | A/C Compressor Clutch Control | II | — |
| A5 - A6 | — | — | — | Not Occupied | — | — |
| B1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | IV | — |
| B2 | 0.5 | YE/BK | 625 | Starter Enable Relay Control | II | — |
| B3 - B5 | — | — | — | Not Occupied | — | — |
| B6 | 3 | RD/GY | 1342 | Battery Positive Voltage | IV | — |
| C1 - C2 | — | — | — | Not Occupied | — | — |

## X50A Fuse Block - Underhood X3 (LV3) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| C3 | 0.5 | BK | 4450 | Ground | V | — |
| C4 | 0.5 | WH/GY | 459 | A/C Compressor Clutch Relay Control | V | — |
| C5 - D1 | — | — | — | Not Occupied | — | — |
| D2 | 10 | RD/WH | 342 | Battery Positive Voltage | VII | — |
| E1 | — | — | — | Not Occupied | — | — |
| E2 | 10 | RD/GY | 642 | Battery Positive Voltage | VII | — |
| F1 - F3 | — | — | — | Not Occupied | — | — |
| F4 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | V | — |
| F5 - F8 | — | — | — | Not Occupied | — | — |
| G1 | 0.5 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | II | — |
| G2 - G3 | — | — | — | Not Occupied | — | — |
| G4 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | II | — |
| G5 | 1 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | III | — |
| G6 - H1 | — | — | — | Not Occupied | — | — |
| H2 | 1 | VT/BU | 5292 | Powertrain Main Relay Fused Supply 3 | I | — |
| H3 | 0.5 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | II | — |
| H4 - H5 | — | — | — | Not Occupied | — | — |
| H6 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | VI | — |

# X50A Fuse Block - Underhood X4



4993031

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33384574
Service Connector: 19371188
Description: 44-Way F 1.5, 2.8, 6.3 CTS, 9.5 MCON-LL Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19332365 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | Not Required | J-35616-22 (RD) | - | Not Available | Not Available | Not Available | Not Available |

## X50A Fuse Block - Underhood X4

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A1 | — | — | — | Not Occupied | — | — |
| A2 | 0.75 | VT/GY | 709 | Left Park Lamp Control | II | — |
| A3 | 1.5 | GY/BN | 2109 | Trailer Park Lamp Control | II | — |
| A4 | 0.75 | GY/BN | 309 | Right Park Lamp Control | II | — |
| A5 - A6 | — | — | — | Not Occupied | — | — |
| B1 | 0.5 | GN/WH | 24 | Backup Lamp Control | II | — |
| B2 | 0.75 | WH/GN | 1624 | Trailer Backup Lamp Control | II | — |
| B3 | 1 | RD/GN | 2440 | Battery Positive Voltage | II | — |
| B4 | 0.5 | RD/GN | 1840 | Battery Positive Voltage | II | — |
| B5 - C6 | — | — | — | Not Occupied | — | — |
| C7 | 0.5 | RD/WH | 2040 | Battery Positive Voltage | I | — |
| C8 - D1 | — | — | — | Not Occupied | — | — |
| D2 | 10 | RD/GN | 742 | Battery Positive Voltage | III | — |
| E1 - G2 | — | — | — | Not Occupied | — | — |
| G3 | 0.75 | YE/BU | 318 | Left Rear Trailer Stop/Turn Lamp Control | II | — |
| G4 | 2 | RD/YE | 5840 | Battery Positive Voltage | II | — |
| G5 | 1 | RD/WH | 3440 | Battery Positive Voltage | II | — |

## X50A Fuse Block - Underhood X4 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| G6 | 2.5 | RD/YE | 1142 | Battery Positive Voltage | II | — |
| H1 - H2 | — | — | — | Not Occupied | — | — |
| H3 | 0.75 | GN/VT | 1619 | Right Rear Trailer Stop/Turn Lamp Control | II | — |
| H4 | 2 | RD/VT | 5640 | Battery Positive Voltage | II | — |
| H5 | 2.5 | RD/VT | 1940 | Battery Positive Voltage | II | — |
| H6 | 2.5 | RD/VT | 1242 | Battery Positive Voltage | II | — |

## X50A Fuse Block - Underhood X5

—

### Connector Part Information

Harness Type: Generator
OEM Connector: 84386513
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

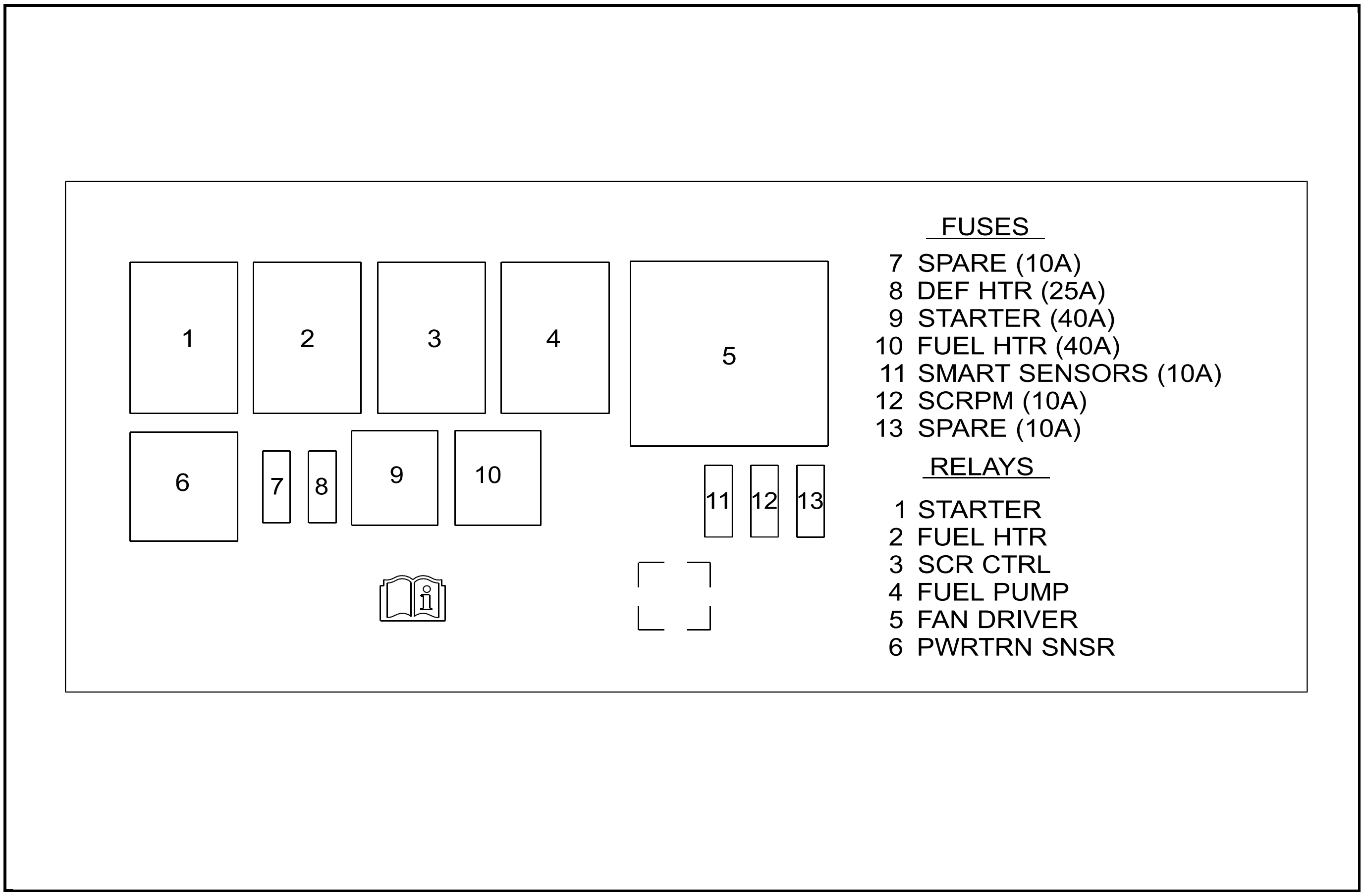
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### X50A Fuse Block - Underhood X5

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | — | RD/GN | 242 | Battery Positive Voltage | I | — |

## X50B Fuse Block - Underhood Auxiliary Label (LM2)


1
2
3
4
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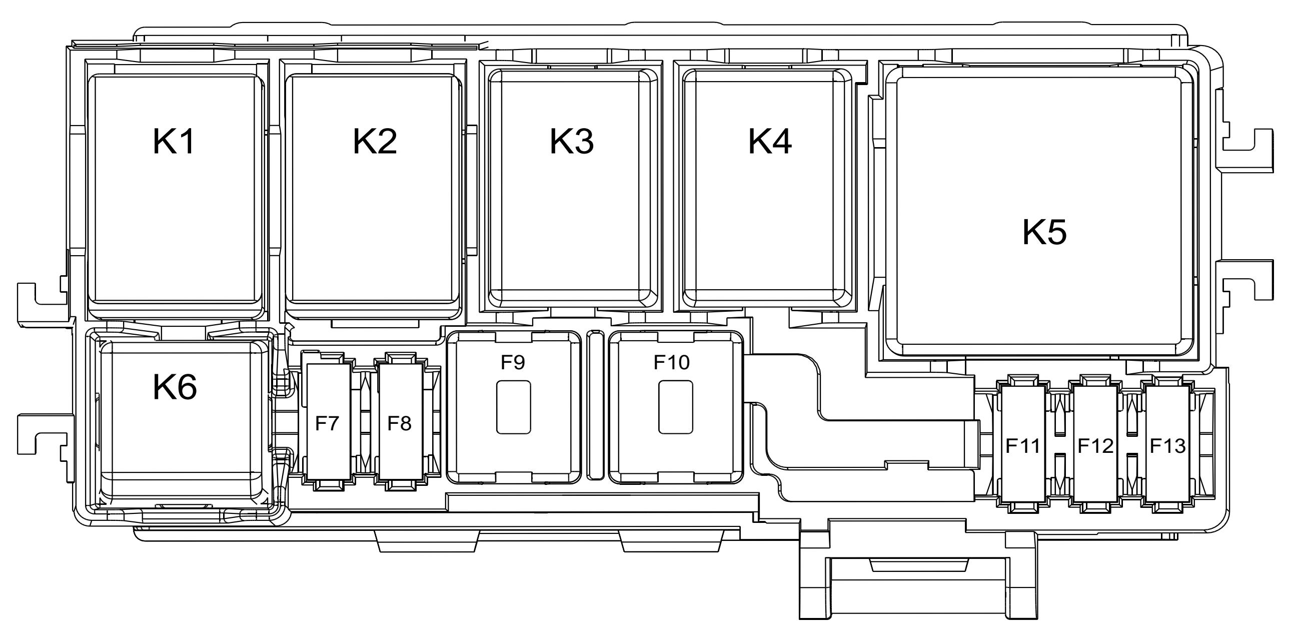
6
7
8
9
10
11
12
13
FUSES
7 SPARE (10A)
8 DEF HTR (25A)
9 STARTER (40A)
10 FUEL HTR (40A)
11 SMART SENSORS (10A)
12 SCRPM (10A)
13 SPARE (10A)
RELAYS
1 STARTER
2 FUEL HTR
3 SCR CTRL
4 FUEL PUMP
5 FAN DRIVER
6 PWRTRN SNSR

5118008

## X50B Fuse Block - Underhood Auxiliary Top View (LM2)



### Usage Table

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| **Fuses** | | | | |
| 7 | SPARE | F7UB | — | • KR121B Reductant Control Module Relay 2 |
| 8 | DEF HTR | F8UB | 25A | • Not Used |
| 9 | STARTER | F9UB | 40A | • KR121A Reductant Control Module Relay 1<br>• F13UB |
| 10 | FUEL HTR | F10UB | 40A | • KR22 Fuel Heater Relay |
| 11 | SMART SENSORS | F11UB | 10A | • B136 Exhaust Particulate Sensor<br>• B195A Nitrogen Oxides Sensor 1<br>• B195B Nitrogen Oxides Sensor 2<br>• B195C Nitrogen Oxides Sensor 3 |
| 12 | SCRPM | F12UB | 10A | • K111 Fuel Pump Driver Control Module<br>• K115 Reductant Control Module |
| 13 | SPARE | F13UB | — | • Engine Coolant Pump Relay |
| **Relays** | | | | |
| 1 | STARTER | KR121A Reductant Control Module Relay 1 | — | • K115 Reductant Control Module |
| 2 | FUEL HTR | KR22 Fuel Heater Relay | — | • E11A Fuel Heater/Water in Fuel Sensor |
| 3 | SCR CTRL | Engine Coolant Pump Relay | — | • G59 Engine Coolant Pump |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| 4 | FUEL PUMP | KR121B Reductant Control Module Relay 2 | — | • F11UB<br>• F12UB |
| 5 | FAN DRIVER | — | — | — |
| 6 | PWRTRN SNSR | — | — | — |

## X50B Fuse Block - Underhood Auxiliary

—

### Connector Part Information

Harness Type: Engine
OEM Connector: 35096237
Service Connector: Service by Component Assembly - See Part Catalog
Description: -Way Wire Entry Fuse Block

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13327158 | J-35616-42 (RD) | J-38125-215A | Not Required | Not Required | Not Required | Not Required |
| II | 13327178 | J-35616-43 (RD) | J-38125-215A | Not Required | Not Required | Not Required | Not Required |
| III | 19119592 | J-35616-4A (PU) | J-38125-557 | Not Required | Not Required | Not Required | Not Required |
| IV | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Required | Not Required | Not Required | Not Required |
| V | Not Required | J-35616-22 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| VI | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

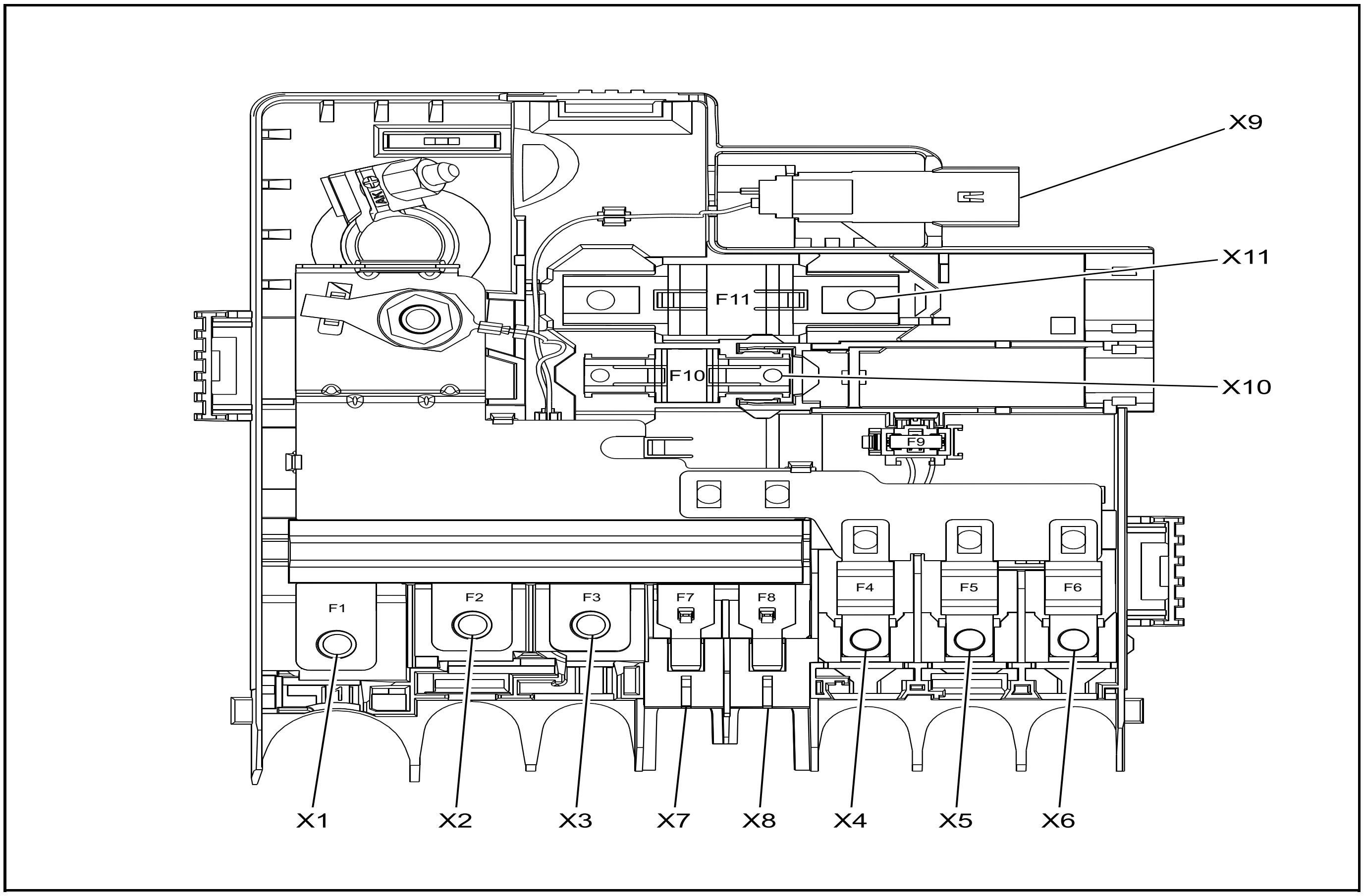
### X50B Fuse Block - Underhood Auxiliary

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 2 | 0.5 | GY/BN | 7071 | Heater Fuel Control | III | — |
| 3 | 2.5 | VT/GN | 355 | Fuel Filter Heater Voltage | III | — |
| 4 | 0.5 | BK | 4450 | Ground | III | — |
| 5 | 2.5 | BU | 3921 | DEF Heater Supply 1 | III | — |
| 6 | 0.5 | GN/BU | 3889 | DEF Power Module Relay Control | I | — |
| 7 | 0.5 | RD/BU | 4540 | Battery Positive Voltage | I | — |
| 8 | 0.5 | BK | 4450 | Ground | I | — |
| 9 | 1 | RD/GN | 40 | Battery Positive Voltage | I | — |
| 17 | 2.5 | VT/GN | 355 | Fuel Filter Heater Voltage | III | — |
| 18 | 2.5 | VT/GN | 355 | Fuel Filter Heater Voltage | III | — |
| 19 | 2.5 | BU | 3921 | DEF Heater Supply 1 | III | — |
| 20 | 0.5 | GN/BU | 3889 | DEF Power Module Relay Control | III | — |
| 21 | 0.5 | GN/BU | 9999 | DEF Heater Supply #2 | I | — |
| 22 | 0.5 | BK | 4450 | Ground | I | — |
| 23 | 1 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | III | — |
| 24 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | III | — |
| 25 | 1 | RD/GN | 40 | Battery Positive Voltage | III | — |
| 26 | 0.5<br>1.5 | GN/BU<br>GN/GY | 9999<br>9999 | DEF Heater Supply #2<br>DEF Heater Supply #2 | IV<br>VI | —<br>— |
| 27 | 1.5 | GN/GY | 9999 | DEF Heater Supply #2 | IV | — |
| 28 | 10 | RD/VT | 4040 | Battery Positive Voltage | V | — |
| 29 | 2.5 | RD/GN | 40 | Battery Positive Voltage | III | — |

## X50B Fuse Block - Underhood Auxiliary (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 30 | 0.5 | VT/GN | 4320 | Selective Catalytic Reduction Power Module Wake-Up Signal | III | — |
| 31 | 2.5 | VT/BU | 3674 | NOx Sensor 1 Control | II | — |
| 32 | 2.5 | VT/GN | 355 | Fuel Filter Heater Voltage | II | — |
| 33 | 2.5 | BU | 3921 | DEF Heater Supply 1 | II | — |
| 34 | 0.5 | RD/BU | 4540 | Battery Positive Voltage | III | — |

## X50D Fuse Block - Battery Top View

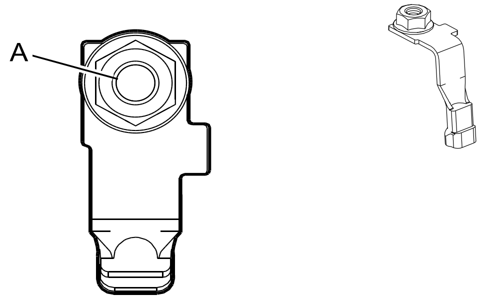

X9
X11
F11
X10
F10
F9
F1
F2
F3
F7
F8
F4
F5
F6
X1
X2
X3
X7
X8
X4
X5
X6

5070128

## Usage Table

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| **Fuses** | | | | |
| F1 | — | F1UD | 175A (LV3/ L82/L84/ L87)<br>250A (L3B/ LM2) | • G13 Generator<br>• X50A Fuse Block - Underhood |
| F2 | — | F2UD | 175A | • K43 Power Steering Control Module |
| F3 | — | F3UD | 400A | • M64 Starter Motor |
| F4 | — | F4UD | 100A | • E40 Electrical Auxiliary Heater (C32) |
| F5 | — | F5UD | 80A | • K34 Glow Plug Control Module (LM2) |
| F6 | — | F6UD | 80A | • G59 Engine Coolant Pump (L3B)<br>• G10R Cooling Fan Motor - Right (LM2) |
| F7 | — | F7UD | 60A | • X51R Fuse Block - Instrument Panel Right |
| F8 | — | F8UD | 60A | • K160 Brake System Control Module |
| F9 | — | F9UD | 5A | • B110 Battery Sensor Module (KL9)<br>• K9 Body Control Module (-KL9) |
| F10 | — | F10UD | 60A | • X51B Fuse Block - Instrument Panel Auxiliary (LM2) |
| F11 | — | F11UD | — | — |

## X50D Fuse Block - Battery X1



4249176

### Connector Part Information

Harness Type: Generator
OEM Connector: 84386516
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F

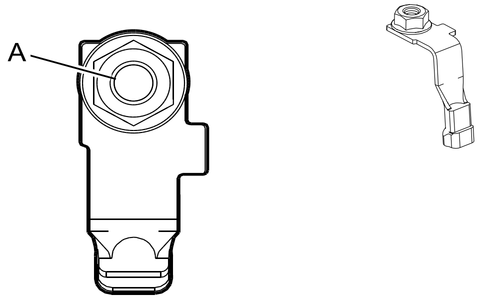
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### X50D Fuse Block - Battery X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD/YE | 2 | Battery Positive Voltage | I | — |
| | 35 | RD/GN | 242 | Battery Positive Voltage | | — |

## X50D Fuse Block - Battery X2



4249176

### Connector Part Information

Harness Type: Power Steering
OEM Connector: 84386514
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Ring Terminal

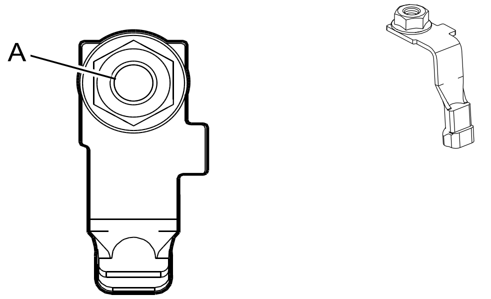
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### X50D Fuse Block - Battery X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 25 | RD/VT | 3542 | Battery Positive Voltage | I | — |

# X50D Fuse Block - Battery X3



4249176

## Connector Part Information

Harness Type: Starter Motor
OEM Connector: 84386515
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Ring Terminal

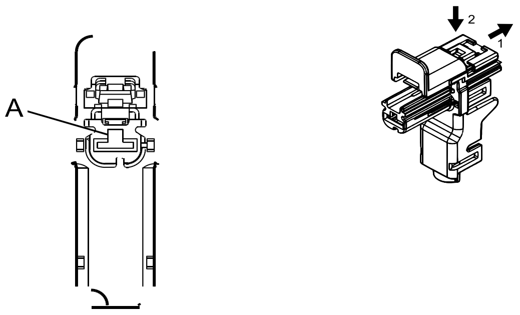
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X50D Fuse Block - Battery X3

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 35 | RD/YE | 2 | Battery Positive Voltage | I | — |

# X50D Fuse Block - Battery X4 (C32)



4994183

## Connector Part Information

Harness Type: Body
OEM Connector: 33297578
Service Connector: Service by Cable Assembly - See Part Catalog
Description: 1-Way F 6.3 Series (BK)

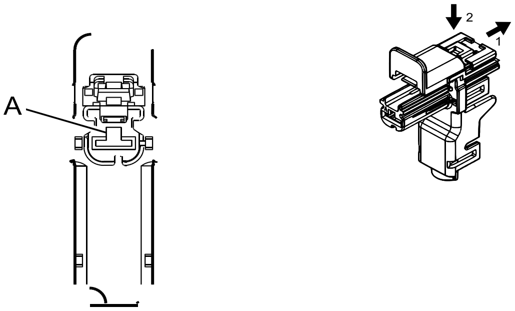
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X50D Fuse Block - Battery X4 (C32)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 12 | RD/GY | 642 | Battery Positive Voltage | I | — |

# X50D Fuse Block - Battery X5 (LM2)



4994171

## Connector Part Information

Harness Type: Glow Plug
OEM Connector: 33297579
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 6.3 Series (BU)

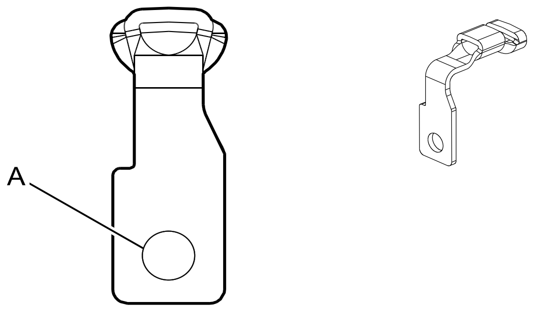
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X50D Fuse Block - Battery X5 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 12 | RD/VT | 842 | Battery Positive Voltage | I | — |

# X50D Fuse Block - Battery X6 (L3B)



4994507

## Connector Part Information

Harness Type: Engine
OEM Connector: 35085183
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Ring Terminal

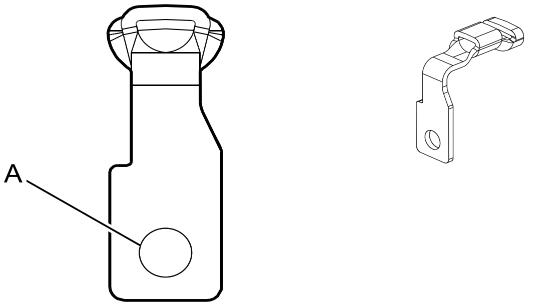
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X50D Fuse Block - Battery X6 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 10 | RD/BN | 440 | Battery Positive Voltage | I | — |

# X50D Fuse Block - Battery X6 (LM2)



4994507

## Connector Part Information

Harness Type: Engine
OEM Connector: 35085183
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Ring Terminal

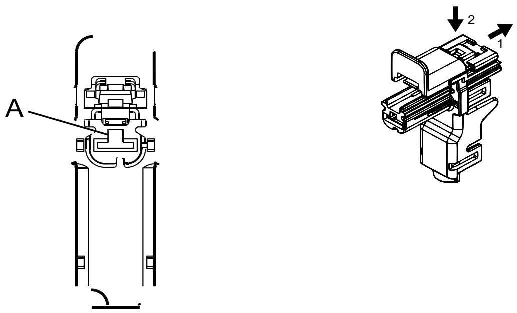
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X50D Fuse Block - Battery X6 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 8 | RD | 642 | Battery Positive Voltage | I | — |

## X50D Fuse Block - Battery X7



4994183

### Connector Part Information

Harness Type: Body
OEM Connector: 33297578
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 6.3 Series (BK)

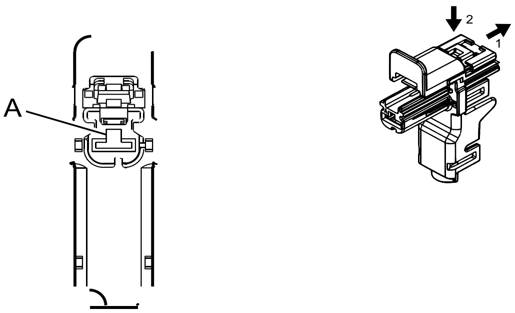
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-42 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### X50D Fuse Block - Battery X7

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 5 | RD/GY | 142 | Battery Positive Voltage | I | — |

# X50D Fuse Block - Battery X8



4994171

## Connector Part Information

Harness Type: Body
OEM Connector: 33297579
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 6.3 Series (BU)

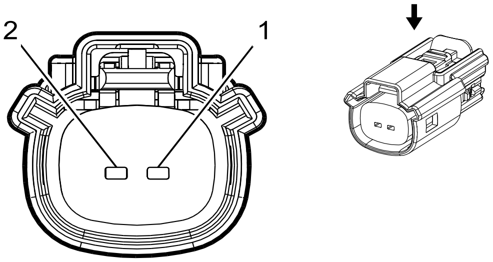
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-42 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X50D Fuse Block - Battery X8

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 6 | RD/VT | 1640 | Battery Positive Voltage | I | — |

# X50D Fuse Block - Battery X9



2474713

## Connector Part Information

Harness Type: Body
OEM Connector: 13782480
Service Connector: 13577534
Description: 2-Way F 150 MX Series, Sealed (BK)

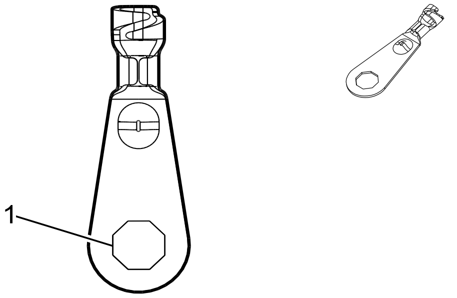
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X50D Fuse Block - Battery X9

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | RD/YE | 2340 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |

# X50D Fuse Block - Battery X10



2239319

## Connector Part Information

Harness Type: Auxiliary Instrument Panel
OEM Connector: 13624366
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Ring Terminal

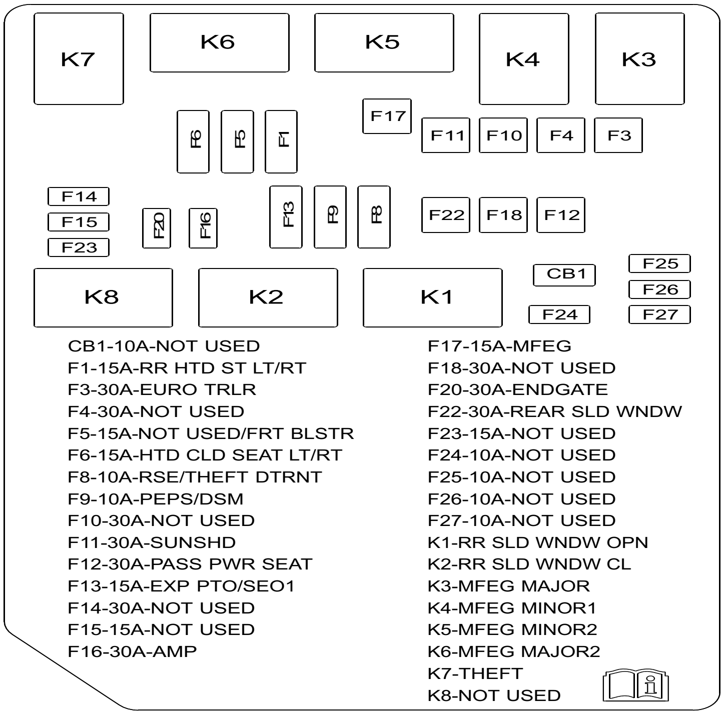
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X50D Fuse Block - Battery X10

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 5 | RD/BU | 42 | Battery Positive Voltage | I | — |

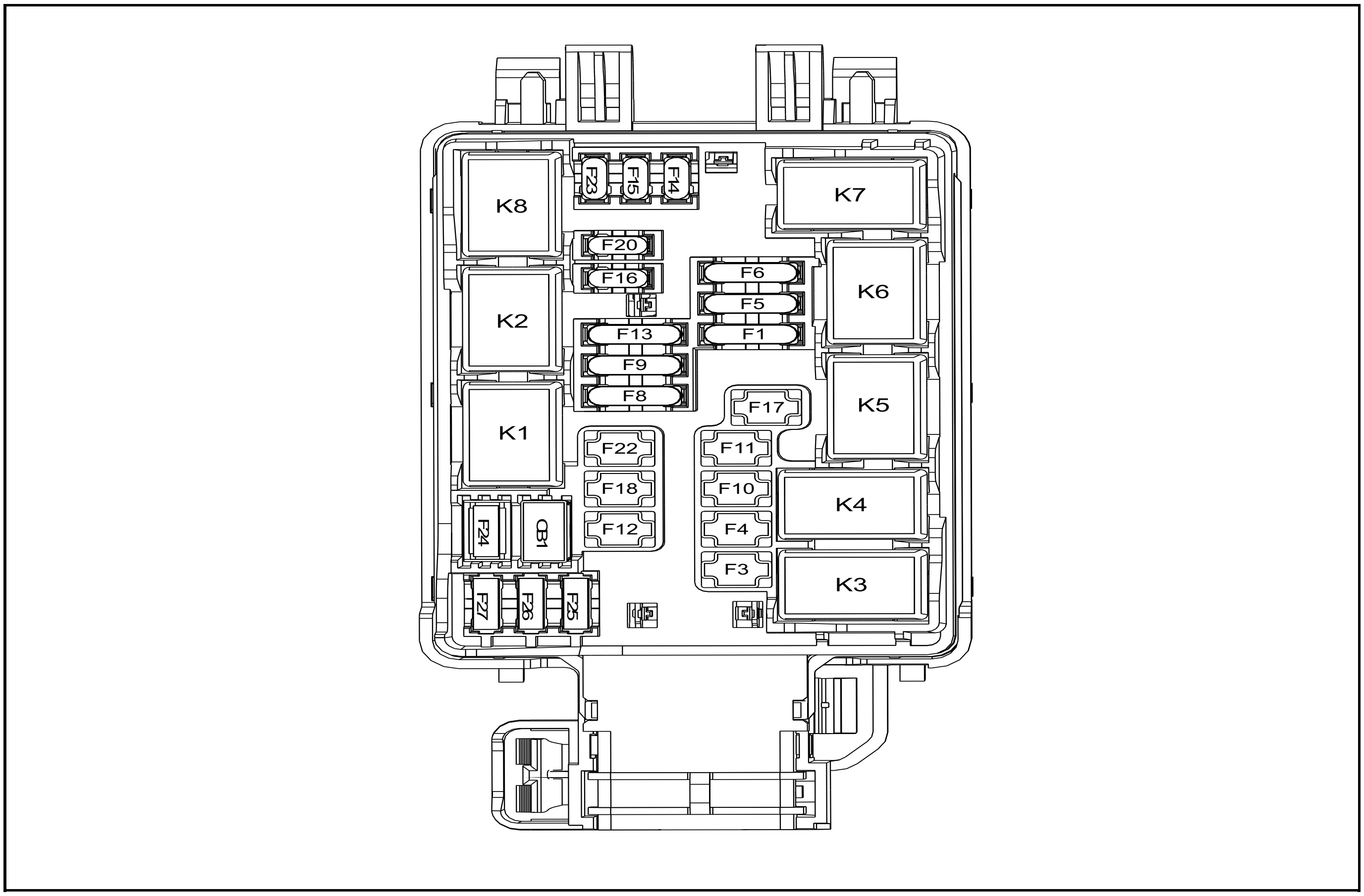
# X51L Fuse Block - Instrument Panel Left Label


K7
K6
K5
K4
K3
F17
F6
F5
F1
F11
F10
F4
F3
F14
F15
F23
F20
F16
F13
F9
F8
F22
F18
F12
F25
F26
F27
CB1
F24
K8
K2
K1

CB1-10A-NOT USED
F1-15A-RR HTD ST LT/RT
F3-30A-EURO TRLR
F4-30A-NOT USED
F5-15A-NOT USED/FRT BLSTR
F6-15A-HTD CLD SEAT LT/RT
F8-10A-RSE/THEFT DTRNT
F9-10A-PEPS/DSM
F10-30A-NOT USED
F11-30A-SUNSHD
F12-30A-PASS PWR SEAT
F13-15A-EXP PTO/SEO1
F14-30A-NOT USED
F15-15A-NOT USED
F16-30A-AMP
F17-15A-MFEG
F18-30A-NOT USED
F20-30A-ENDGATE
F22-30A-REAR SLD WNDW
F23-15A-NOT USED
F24-10A-NOT USED
F25-10A-NOT USED
F26-10A-NOT USED
F27-10A-NOT USED
K1-RR SLD WNDW OPN
K2-RR SLD WNDW CL
K3-MFEG MAJOR
K4-MFEG MINOR1
K5-MFEG MINOR2
K6-MFEG MAJOR2
K7-THEFT
K8-NOT USED

5085578

## X51L Fuse Block - Instrument Panel Left Top View


F23
F15
F14
K8
K7
F20
F16
F6
K6
F5
K2
F13
F1
F9
F8
F17
K5
K1
F22
F11
F18
F10
K4
F24
CB1
F12
F4
F3
K3
F27
F26
F25

5041380

### Usage Table

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| **Fuses** | | | | |
| F1 | Rear heated seats left/right | F1DL | 15A | • K29R Seat Heating Control Module - Rear (KA6) |
| F3 | Euro trailer | F3DL | 30A | • Not Used |
| F4 | — | F4DL | 30A | • Not Used |
| F5 | Front Bolster | F5DL | 15A | • Not Used |
| F6 | Heated and cooled seats left/right | F6DL | 15A | • K29F Seat Heating Control Module - Front (KA1) |
| F8 | Rear seat entertainment/Theft detterent | F8DL | — | — |
| F9 | Passive entry/Passive start/Driver seat module | F9DL | 10A | • K84 Keyless Entry Control Module (BTM) |
| F10 | — | F10DL | 30A | • Not Used |
| F11 | Sunshade | F11DL | 30A | • Not Used |
| F12 | Passenger power seat | F12DL | 30A | • Not Used |
| F13 | Export power take off/Special equipment option 1 | F13DL | 15A | • Not Used |
| F14 | — | F14DL | 30A | • Not Used |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F15 | — | F15DL | 15A | • Not Used |
| F16 | AMP | F16DL | 30A | • T3 Audio Amplifier (UQA) |
| F17 | MFEG | F17DL | 15A | • KR191L Pickup Box Endgate Latch Relay - Left (QT5)<br>• KR192L Pickup Box Auxiliary Endgate Latch Relay - Left (QK2+QT5) |
| F18 | — | F18DL | 30A | • Not Used |
| F20 | Endgate | F20DL | 30A | • K194 Pickup Box Endgate Control Module (QT6) |
| F22 | Rear sliding window | F22DL | 30A | • KR8A Sliding Rear Window Close Relay (A48)<br>• KR8B Sliding Rear Window Open Relay (A48) |
| F23 | — | F23DL | 15A | • Not Used |
| F24 | — | F24DL | 10A | • Not Used |
| F25 | — | F25DL | 10A | • Not Used |
| F26 | — | F26DL | 10A | • Not Used |
| F27 | — | F27DL | 10A | • Not Used |
| **Circuit Breakers** | | | | |
| CB1 | — | CB1DL | 10A | • Not Used |
| **Relays** | | | | |
| K1 | Rear sliding window open | KR8B | — | • M63 Sliding Rear Window Motor (A48) |
| K2 | Rear sliding window close | KR8A | — | • M63 Sliding Rear Window Motor (A48) |
| K3 | MFEG major 1 | MFEG1A | — | • A99L Pickup Box Endgate Latch - Left (QK2)<br>• A99R Pickup Box Endgate Latch - Right (QK2)<br>• Pickup Box Endgate Latch (QK1) |
| K4 | MFEG minor 1 | MFEG1B | — | • A99L Pickup Box Endgate Latch - Left (QK2)<br>• A99R Pickup Box Endgate Latch - Right (QK2)<br>• Pickup Box Endgate Latch (QK1) |
| K5 | MFEG minor 2 | MFEG2B | — | • A100L Pickup Box Auxiliary Endgate Latch - Left (QK2)<br>• A100R Pickup Box Auxiliary Endgate Latch - Right (QK2) |
| K6 | MFEG major 2 | MFEG2A | — | • A100L Pickup Box Auxiliary Endgate Latch - Left (QK2)<br>• A100R Pickup Box Auxiliary Endgate Latch - Right (QK2) |
| K7 | Anti-theft | — | — | — |
| K8 | — | — | — | — |

# X51L Fuse Block - Instrument Panel Left Bottom View

—

## Connector Part Information

Harness Type: Body
OEM Connector: 33333390
Service Connector: Service by Component Assembly - See Part Catalog
Description: —

## Terminal Part Information

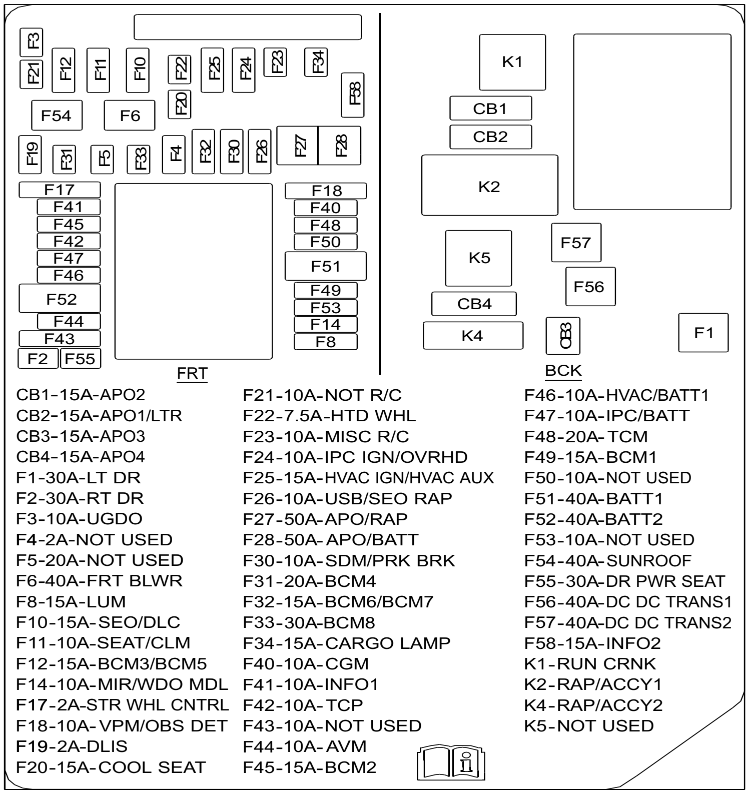
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575574 | J-35616-5 (PU) | J-38125-215A | Not Required | Not Required | Not Required | Not Required |
| II | 13584548 | J-35616-5 (PU) | J-38125-215A | Not Required | Not Required | Not Required | Not Required |
| III | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Required | Not Required | Not Required | Not Required |
| IV | Not Required | J-35616-22 (RD) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

## X51L Fuse Block - Instrument Panel Left Bottom View

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH/GN | 7728 | Major Endgate High Relay Control | III | QT5 |
| 2 | 0.5 | GN | 1299 | Major Endgate Motor Supply Voltage | III | QT5 |
| 3 | 0.35 | WH/GY | 7297 | Minor Endgate High Relay Control | III | QK2 |
| 4 | 0.5 | VT | 7725 | Minor Endgate Motor Supply Voltage | III | QK2 |
| 5 | 0.5 | BK | 1150 | Ground | III | QK2+QT5 |
| 6 | 0.5 | BN/YE | 7727 | Minor Endgate Motor Common | III | QK2 |
| 7 | 0.35 | GY/BU | 7298 | Minor Endgate Low Relay Control | III | AK2 |
| 8 | 0.5<br>0.5 | BK<br>BK | 1150<br>1150 | Ground<br>Ground | III | QT5<br>QT5 |
| 9 | 0.5 | BN/VT | 7731 | Major Endgate Motor Common | III | QT5 |
| 10 | 0.35 | BU/VT | 7729 | Major Endgate Low Relay Control | III | QT5 |
| 13 | 0.5 | BN/VT | 7731 | Major Endgate Motor Common | III | QT5 |
| 14 | 0.5 | BN/YE | 7727 | Minor Endgate Motor Common | III | QK2 |
| 15 | 0.5<br>0.5 | BK<br>BK | 1150<br>1150 | Ground<br>Ground | III | QK2+QT5<br>QK2+QT5 |
| 16 | 0.5 | BN/BK | 7726 | Minor Endgate Motor Return | III | QK2 |
| 17 | 0.5<br>0.5 | BK<br>BK | 1150<br>1150 | Ground<br>Ground | III | QT5<br>QT5 |
| 18 | 0.5 | YE/BK | 7730 | Major Endgate Motor Return | III | QT5 |
| 20 | 0.5 | RD/BU | 7640 | Battery Positive Voltage | III | QT5 |
| 21 | 0.5 | BK | 1150 | Ground | III | QT5 |
| 22 | 0.5 | RD/BU | 7640 | Battery Positive Voltage | III | QT5+QK2 |
| 23 | 0.5<br>0.5 | BK<br>BK | 1150<br>1150 | Ground<br>Ground | III | QT5+QK2<br>QT5+QK2 |
| 26 | 0.5<br>0.5 | RD/BU<br>RD/BU | 7640<br>7640 | Battery Positive Voltage<br>Battery Positive Voltage | II | QK2+QT5<br>QT5 |

## X51L Fuse Block - Instrument Panel Left Bottom View (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 27 | 0.5 | RD/YE | 240 | Battery Positive Voltage | III | KA6 |
| 29 | 0.5 | RD/GN | 5140 | Battery Positive Voltage | III | KA1 |
| 30 | 10 | RD/GY | 2042 | Battery Positive Voltage | IV | KA1/QT5 |
| 35 | 0.5 | RD/VT | 340 | Battery Positive Voltage | III | KA6 |
| 37 | 0.5 | RD | 6140 | Battery Positive Voltage | III | KA1 |
| 40 | 0.5 | RD/YE | 4340 | Battery Positive Voltage | III | BTM |
| 42 | 10 | RD/VT | 2142 | Battery Positive Voltage | IV | BTM/A48 |
| 44 | 2.5 | RD/BN | 1440 | Battery Positive Voltage | I | A7K |
| 46 | 2.5 | RD/VT | 3340 | Battery Positive Voltage | I | A48 |
| 50 | 2.5 | RD/YE | 3740 | Battery Positive Voltage | III | UQA |
| 51 | 2.5 | RD/GY | 7040 | Battery Positive Voltage | III | QT6 |
| 57 | 2.5 | RD/VT | 3340 | Battery Positive Voltage | III | A48 |
| 58 | 2.5 | BK | 1150 | Ground | III | A48 |
| 59 | 0.5 | BK | 1150 | Ground | III | A48 |
| 60 | 2.5 | RD/VT | 3340 | Battery Positive Voltage | III | A48 |
| 61 | 2.5 | BK | 1150 | Ground | III | A48 |
| 62 | 0.5 | BK | 1150 | Ground | III | A48 |
| 71 | 0.35 | YE/VT | 6191 | Power Sliding Window Switch Open Signal | III | A48 |
| 72 | 2.5 | GY/GN | 5441 | Endgate Window Regulator Down Signal | III | A48 |
| 73 | 0.35 | WH | 6192 | Power Sliding Window Switch Close Signal | III | A48 |
| 74 | 2.5 | YE/BU | 5442 | Endgate Window Regulator Up Signal | III | A48 |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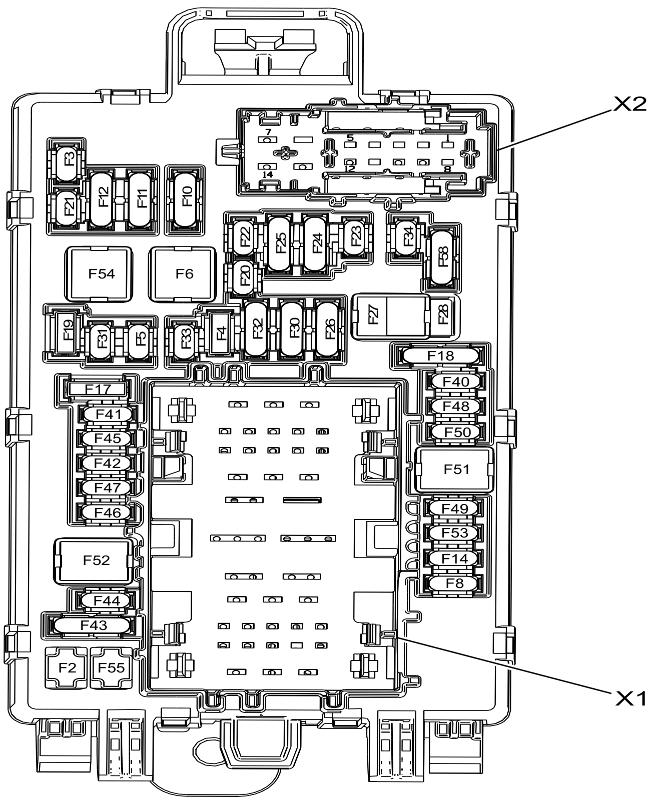
F46
F52
F44
F43
F2
F55
FRT
F18
F40
F48
F50
F51
F49
F53
F14
F8
K1
CB1
CB2
K2
K5
F57
F56
CB4
K4
CB3
F1
BCK

CB1-15A-APO2
CB2-15A-APO1/LTR
CB3-15A-APO3
CB4-15A-APO4
F1-30A-LT DR
F2-30A-RT DR
F3-10A-UGDO
F4-2A-NOT USED
F5-20A-NOT USED
F6-40A-FRT BLWR
F8-15A-LUM
F10-15A-SEO/DLC
F11-10A-SEAT/CLM
F12-15A-BCM3/BCM5
F14-10A-MIR/WDO MDL
F17-2A-STR WHL CNTRL
F18-10A-VPM/OBS DET
F19-2A-DLIS
F20-15A-COOL SEAT
F21-10A-NOT R/C
F22-7.5A-HTD WHL
F23-10A-MISC R/C
F24-10A-IPC IGN/OVRHD
F25-15A-HVAC IGN/HVAC AUX
F26-10A-USB/SEO RAP
F27-50A-APO/RAP
F28-50A-APO/BATT
F30-10A-SDM/PRK BRK
F31-20A-BCM4
F32-15A-BCM6/BCM7
F33-30A-BCM8
F34-15A-CARGO LAMP
F40-10A-CGM
F41-10A-INFO1
F42-10A-TCP
F43-10A-NOT USED
F44-10A-AVM
F45-15A-BCM2
F46-10A-HVAC/BATT1
F47-10A-IPC/BATT
F48-20A-TCM
F49-15A-BCM1
F50-10A-NOT USED
F51-40A-BATT1
F52-40A-BATT2
F53-10A-NOT USED
F54-40A-SUNROOF
F55-30A-DR PWR SEAT
F56-40A-DC DC TRANS1
F57-40A-DC DC TRANS2
F58-15A-INFO2
K1-RUN CRNK
K2-RAP/ACCY1
K4-RAP/ACCY2
K5-NOT USED

5041372

## X51R Fuse Block - Instrument Panel Right Top View


X2
7
14
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F48
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F51
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F14
F8
F17
F41
F45
F42
F47
F46
F52
F44
F43
F2
F55
X1

5041376

### Usage Table

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| **Fuses** | | | | |
| F2 | RT DR | F2DR | 30A | • M74P Window Motor - Passenger (AEF)<br>• S79P Window Switch - Passenger (AED/AEF)<br>• S79RR Window Switch - Right Rear (AEQ) |
| F3 | UGDO | F3DR | 10A | • A98 Front Overhead Console Assembly<br>• E37B Dome/Reading Lamps - 2nd Row (Extended Cab/Crew Cab) |
| F4 | NOT USED | F4DR | 2A | — |
| F5 | NOT USED | F5DR | 20A | — |
| F6 | FRT BLWR | F6DR | 40A | • M8 Blower Motor |
| F8 | LUM | F8DR | 15A | • S65D Seat Lumbar Support Switch - Driver (A2X)<br>• S65P Seat Lumbar Support Switch - Passenger (A7K) |
| F10 | SEO/DLC | F10DR | 15A | • K9 Body Control Module |
| F11 | SEAT/CLM | F11DR | 10A | • F19DR (-BTM)<br>• K40 Seat Memory Control Module (A45)<br>• K60 Steering Column Lock Module (BTM) |
| F12 | BCM3/BCM5 | F12DR | 15A | • K9 Body Control Module |
| F14 | MIR/WDO MDL | F14DR | 10A | • S146 Window/Outside Rearview Mirror Switch - Driver (AXG) |
| F17 | STR WHL CNTRL | F17DR | 2A | • S70L Steering Wheel Controls Switch - Left (K34)<br>• S70R Steering Wheel Controls Switch - Right (K34) |

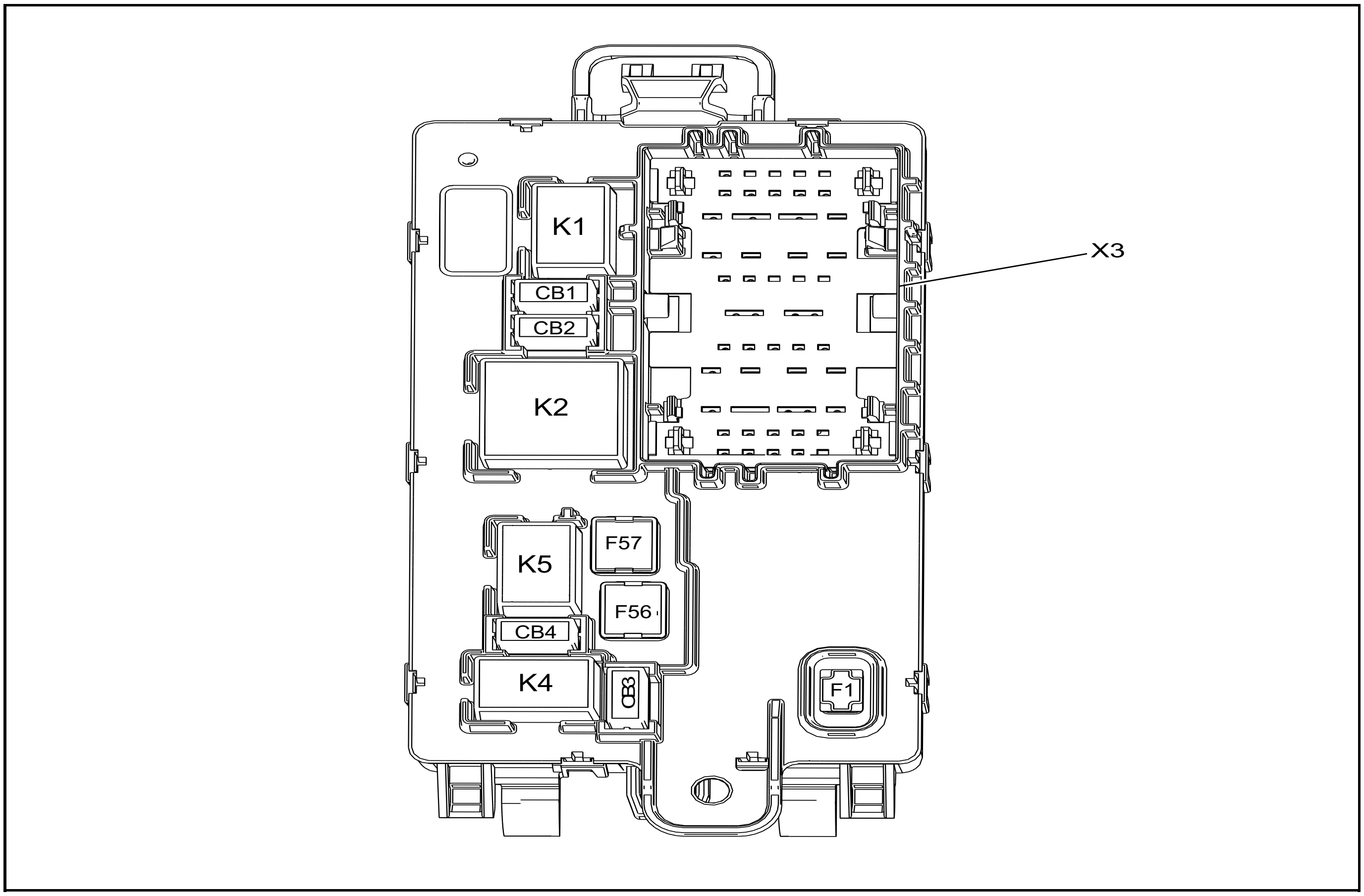
## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F18 | VPM/OBS DET | F18DR | 10A | • B174W Frontview Camera - Windshield (UEU/UHX)<br>• K157 Video Processing Control Module (UVI/UV2)<br>• K182 Parking Assist Control Module (UD5/UD7) |
| F19 | DLIS | F19DR | 2A | • S39 Ignition Switch (-BTM) |
| F20 | COOL SEAT | F20DR | 15A | • M73A Seat Blower Motor - Driver Back (KQV)<br>• M73B Seat Blower Motor - Passenger Back (KQV)<br>• M73C Seat Blower Motor - Driver Cushion (KQV)<br>• M73D Seat Blower Motor - Passenger Cushion (KQV) |
| F21 | NOT R/C | F21DR | 10A | • K60 Steering Colmn Lock Module (BTM) |
| F22 | HTD WHL | F22DR | 7.5A | • K32 Steering Wheel Heating Control Module (KI3) |
| F23 | MISC R/C | F23DR | 10A | • B87 Rearview Camera (UVC)<br>• T19 Power Supply Transformer (KL9) |
| F24 | IPC IGN/OVRHD | F24DR | 10A | • A10 Inside Rearview Mirror (DD8/DRZ)<br>• A98 Front Overhead Console Assembly<br>• K56 Serial Data Gateway Module<br>• P16 Instrument Cluster<br>• P43 Collision Alert Indicators ((UHX/UEU)-UV6) |
| F25 | HVAC IGN/HVAC AUX | F25DR | 15A | • E40 Electrical Auxiliary Heater (C32) |
| F26 | USB/SEO RAP | F26DR | 10A | • A98 Front Overhead Console Assembly<br>• K34 Glow Plug Control Module (LM2)<br>• T22 Mobile Device Wireless Charger Module (K4C)<br>• X92B USB Receptacle - Rear Seat (AZ3)<br>• X92C USB Receptacle - Center Console Rear (D07)<br>• X260 |
| F27 | APO/RAP | F27DR | 50A | • CB1DR<br>• CB2DR |
| F28 | APO/BATT | F28DR | 50A | • CB1DR<br>• CB2DR |
| F30 | SDM/PRK BRK | F30DR | 10A | • B80 Park Brake Switch<br>• K85 Passenger Presence Module<br>• K36 Inflatable Restraint Sensing and Diagnostic Module<br>• S76 Trailer Brake Control Switch (JL1) |
| F31 | BCM4 | F31DR | 20A | • K9 Body Control Module |
| F32 | BCM6/BCM7 | F32DR | 10A | • X84 Data Link Connector |
| F33 | BCM8 | F33DR | 30A | • K9 Body Control Module |
| F34 | CARGO LAMP | F34DR | 15A | • E2A Marker Lamp - Endgate (QT5/QT6)<br>• E6 Center High Mounted Stop Lamp<br>• S30 Headlamp Switch (QT5/QT6) |
| F40 | CGM | F40DR | 10A | • K56 Serial Data Gateway Module |
| F41 | INFO1 | F41DR | 10A | • A26 HVAC Controls<br>• P17 Info Display Module (IOS/IOT/(IOR+UIJ))<br>• P29 Head-Up Display (UV6)<br>• S32R Seat Heating Switch - Rear (KA6)<br>• X83 Auxiliary Audio Input<br>• X92 USB Receptacle |
| F42 | TCP | F42DR | 10A | • K73 Telematics Communication Interface Control Module (UE1) |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| F43 | NOT USED | F43DR | 10A | — |
| F44 | AVM | F44DR | 10A | • Q80L Engine Mount Solenoid Valve - Left (L3B/LM2)<br>• Q80R Engine Mount Solenoid Valve - Right (L3B/LM2) |
| F45 | BCM2 | F45DR | 15A | • K9 Body Control Module |
| F46 | HVAC/BATT1 | F46DR | 10A | • K33 HVAC Control Module |
| F47 | IPC/BATT | F47DR | 10A | • P16 Instrument Cluster |
| F48 | TCM | F48DR | 20A | • K71 Transmission Control Module (MQB/MQE)<br>• Q8 Control Solenoid Valve Assembly (MYC) |
| F49 | BCM1 | F49DR | 15A | • K9 Body Control Module |
| F50 | NOT USED | F50DR | 10A | — |
| F51 | BATT1 | F51DR | 40A | • F18DR (-KL9)<br>• F40DR (-KL9)<br>• F48DR (-KL9)<br>• F49DR (-KL9)<br>• F58DR (-KL9) |
| F52 | BATT2 | F52DR | 40A | • F17DR (-KL9)<br>• F41DR (-KL9)<br>• F42DR (-KL9)<br>• F44DR (-KL9)<br>• F45DR (-KL9)<br>• F46DR (-KL9)<br>• F47DR (-KL9) |
| F53 | NOT USED | F53DR | 10A | — |
| F54 | SUNROOF | F54DR | 40A | • M69 Sunroof Motor (CF5) |
| F55 | DR PWR SEAT | F55DR | 30A | • S64D Seat Adjuster Switch - Driver (A2X-A45)<br>• K40 Seat Memory Control Module (A45) |
| F58 | INFO2 | F58DR | 15A | • A11 Radio |

## X51R Fuse Block - Instrument Panel Right Bottom View



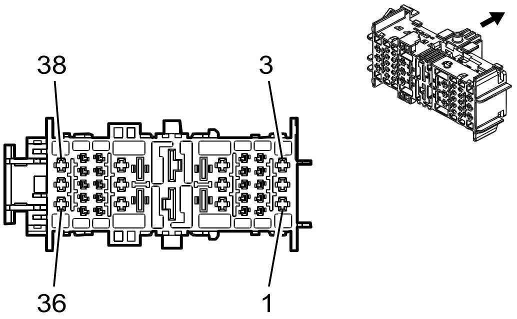
### Usage Table

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| **Circuit Breakers** | | | | |
| CB1 | APO2 | CB1DR | 15A | • X80G Accessory Power Receptacle - Instrument Panel |
| CB2 | APO1/LTR | CB2DR | 15A | • X80L Accessory Power Receptacle - Center Console Rear (D07)<br>• X80M Accessory Power Receptacle - Rear Seat (AZ3) |
| CB3 | APO3 | CB3DR | 15A | — |
| CB4 | APO4 | CB4DR | 15A | — |
| **Fuses** | | | | |
| F1 | LT DR | F1DR | 30A | • M74D Window Motor - Driver (AXG)<br>• S79LR Window Switch - Left Rear (AEQ) |
| F56 | DC DC TRANS1 | F56DR | 40A | • T19 Power Supply Transformer (KL9) |
| F57 | DC DC TRANS2 | F57DR | 40A | • T19 Power Supply Transformer (KL9) |
| **Relays** | | | | |
| K1 | RUN CRANK | KR73 Ignition Main Relay | — | • F20DR<br>• F21DR<br>• F22DR<br>• F23DR<br>• F24DR<br>• F25DR |

## Usage Table (cont'd)

| No. | Device Label Name | Device Assigned Name | Rating | Description |
|---|---|---|---|---|
| K2 | RAP/ACCY1 | KR76A Retained Accessory Power Relay 1 | — | • F26DR<br>• F27DR |
| K4 | RAP/ACCY2 | KR76B Retained Accessory Power Relay 2 | — | • CB3DR<br>• CB4DR |
| K5 | NOT USED | — | — | — |

## X51R Fuse Block - Instrument Panel Right X1 (Regular Cab)



4994230

### Connector Part Information

Harness Type: Body
OEM Connector: 33297514
Service Connector: 19371187
Description: 38-Way F 1.5, 2.8, 6.3 CTS Series (BU)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19370816 | J-35616-42 (RD) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19371175 | J-35616-2A (GY) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| IV | Not Required | J-35616-22 (RD) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

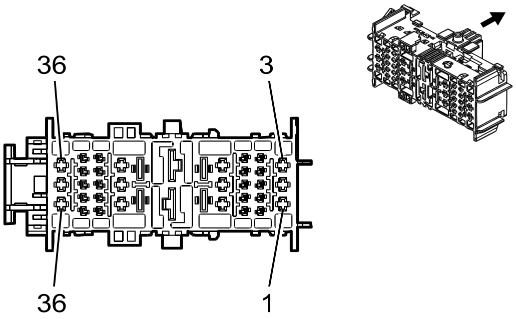
### X51R Fuse Block - Instrument Panel Right X1 (Regular Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 1 | RD/GN | 1840 | Battery Positive Voltage | I | — |
| 4 | 0.5 | RD/WH | 3440 | Battery Positive Voltage | III | — |
| 5 | 0.5<br>0.5 | RD/GN<br>RD/GN | 4440<br>4440 | Battery Positive Voltage<br>Battery Positive Voltage | III | —<br>— |
| 6 | 0.35 | VT/YE | 143 | Accessory Ignition Voltage | III | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35<br>0.35<br>0.35 | VT/YE<br>VT<br>VT/YE | 43<br>4601<br>43 | Accessory Ignition Voltage<br>Retained Accessory Power Fused Control<br>Accessory Ignition Voltage | III | K4C<br>K4C<br>-K4C |
| 9 | 0.35 | RD/GN | 3140 | Battery Positive Voltage | III | — |
| 10 | 0.35<br>0.35 | GY/GN<br>GY/VT | 4083<br>755 | RAP Relay 2 Coil Control<br>RAP Relay Coil Control | III<br>III | BTM<br>-BTM |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | VT/GN | 1739 | Run/Crank Ignition 1 Voltage | III | — |
| 13 | 0.5 | VT/GN | 1739 | Run/Crank Ignition 1 Voltage | III | — |

## X51R Fuse Block - Instrument Panel Right X1 (Regular Cab) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 14 | 0.35 | RD/BN | 1140 | Battery Positive Voltage | I | — |
| 15 | 0.35 | GN/VT | 5199 | Run/Crank Relay Coil Control | I | — |
| 16 | 1.5 | RD/WH | 1040 | Battery Positive Voltage | I | — |
| 17 | 2.5 | RD/YE | 2172 | 12V Regulated Supply Voltage 1 | II | — |
| 18 | 2.5 | RD/YE | 8140 | Battery Positive Voltage | II | — |
| 19 | 10 | RD/GY | 142 | Battery Positive Voltage | IV | — |
| 20 | 10 | RD/WH | 342 | Battery Positive Voltage | IV | — |
| 21 | 2.5 | RD/GN | 2173 | 12V Regulated Supply Voltage 2 | II | — |
| 22 | 2.5 | RD/WH | 8040 | Battery Positive Voltage | II | — |
| 23 | — | — | — | Not Occupied | — | — |
| 24 | 2.5 | RD/BU | 1842 | Battery Positive Voltage | I | — |
| 25 | 2.5 | RD/WH | 1340 | Battery Positive Voltage | I | — |
| 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.35 | RD/GN | 40 | Battery Positive Voltage | III | — |
| 28 | — | — | — | Not Occupied | — | — |
| 29 | 0.35 | RD/VT | 1940 | Battery Positive Voltage | III | — |
| 30 | 0.75 | RD/YE | 8840 | Battery Positive Voltage | III | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.35 | BN/WH | 1429 | Standing Lamp Relay Control | III | — |
| 33 - 35 | — | — | — | Not Occupied | — | — |
| 36 | 2.5 | RD/YE | 5040 | Battery Positive Voltage | I | — |
| 37 - 38 | — | — | — | Not Occupied | — | — |

# X51R Fuse Block - Instrument Panel Right X1 (Crew Cab/Extended Cab)



4994712

## Connector Part Information

Harness Type: Body
OEM Connector: 33371909
Service Connector: 19371181
Description: 38-Way F 1.5, 2.8, 6.3 CTS Series (BU)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19332365 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19370816 | J-35616-42 (RD) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | 19371175 | J-35616-2A (GY) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| V | Not Required | J-35616-22 (RD) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

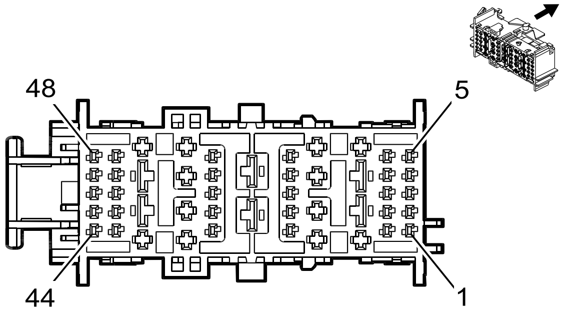
## X51R Fuse Block - Instrument Panel Right X1 (Crew Cab/Extended Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/WH | 4939 | Run/Crank Ignition 1 Voltage | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1 | RD/GN | 1840 | Battery Positive Voltage | II | — |
| 4 | 0.5 | RD/WH | 3440 | Battery Positive Voltage | IV | — |
| 5 | 0.5<br>0.5 | RD/GN<br>RD/GN | 4440<br>4440 | Battery Positive Voltage<br>Battery Positive Voltage | IV | —<br>— |
| 6 | 0.35 | VT/YE | 143 | Accessory Ignition Voltage | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35<br>0.35<br>0.35 | VT/YE<br>VT<br>VT/YE | 43<br>4601<br>43 | Accessory Ignition Voltage<br>Retained Accessory Power Fused Control<br>Accessory Ignition Voltage | IV<br>I | K4C<br>K4C<br>-K4C |
| 9 | 0.35 | RD/GN | 3140 | Battery Positive Voltage | I | — |
| 10 | 0.35<br>0.35 | GY/GN<br>GY/VT | 4083<br>755 | RAP Relay 2 Coil Control<br>RAP Relay Coil Control | I<br>I | CREW CAB<br>EXTENDED CAB |

## X51R Fuse Block - Instrument Panel Right X1 (Crew Cab/Extended Cab) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 11 | 0.35 | RD/VT | 1640 | Battery Positive Voltage | IV | — |
| 12 | 0.5 | VT/GN | 1739 | Run/Crank Ignition 1 Voltage | IV | — |
| 13 | 0.5 | VT/GN | 1739 | Run/Crank Ignition 1 Voltage | IV | — |
| 14 | 0.35 | RD/BN | 1140 | Battery Positive Voltage | II | — |
| 15 | 0.35 | GN/VT | 5199 | Run/Crank Relay Coil Control | II | — |
| 16 | 1.5 | RD/WH | 1040 | Battery Positive Voltage | II | — |
| 17 | 2.5 | RD/YE | 2172 | 12V Regulated Supply Voltage 1 | III | — |
| 18 | 2.5 | RD/YE | 8140 | Battery Positive Voltage | III | — |
| 19 | 10 | RD/GY | 142 | Battery Positive Voltage | V | — |
| 20 | 10 | RD/WH | 342 | Battery Positive Voltage | V | — |
| 21 | 2.5 | RD/GN | 2173 | 12V Regulated Supply Voltage 2 | III | — |
| 22 | 2.5 | RD/WH | 8040 | Battery Positive Voltage | III | — |
| 23 | 2.5 | RD/BU | 1842 | Battery Positive Voltage | II | — |
| 24 | 2.5 | RD/BU | 1842 | Battery Positive Voltage | II | — |
| 25 | 2.5 | RD/WH | 1340 | Battery Positive Voltage | II | — |
| 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.35 | RD/GN | 40 | Battery Positive Voltage | I | — |
| 28 | — | — | — | Not Occupied | — | — |
| 29 | 0.35 | RD/VT | 1940 | Battery Positive Voltage | I | — |
| 30 | 0.75 | RD/YE | 8840 | Battery Positive Voltage | IV | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.35 | BN/WH | 1429 | Standing Lamp Relay Control | I | — |
| 33 - 35 | — | — | — | Not Occupied | — | — |
| 36 | 2.5 | RD/YE | 5040 | Battery Positive Voltage | II | — |
| 37 | 2.5 | RD/WH | 1340 | Battery Positive Voltage | II | — |
| 38 | — | — | — | Not Occupied | — | — |

# X51R Fuse Block - Instrument Panel Right X2



4997272

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33371910
Service Connector: 19371180
Description: 48-Way F 1.5, 2.8, 6.3 CTS Series (GN)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13579915 | J-35616-40 (BU) | J-38125-556 | Not Available | Not Available | Not Available | Not Available |
| II | 13579921 | J-35616-40 (BU) | J-38125-556 | 1241406-1 | Lear 17 | F | 1 |
| III | 19332365 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| V | 19370816 | J-35616-42 (RD) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VI | 19371175 | J-35616-2A (GY) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |

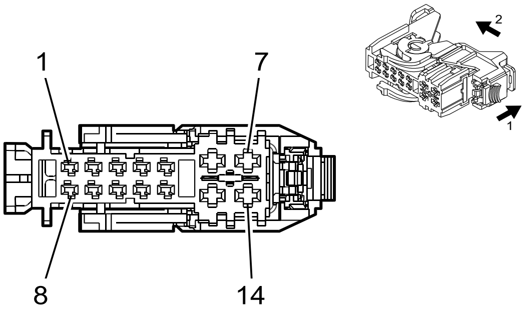
### X51R Fuse Block - Instrument Panel Right X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 1050 | Ground | VI | — |
| 2 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.75 | RD/YE | 2340 | Battery Positive Voltage | VI | — |
| 7 | 0.75 | RD/YE | 2340 | Battery Positive Voltage | VI | — |
| 8 | 0.5 | RD/WH | 3440 | Battery Positive Voltage | VI | — |
| 9 | 0.5<br>0.35 | RD/GY<br>RD/GY | 4140<br>4140 | Battery Positive Voltage<br>Battery Positive Voltage | VI<br>III | BTM<br>-BTM |
| 10 | 0.35 | BU/VT | 807 | OFF /Accessory Ignition Voltage | III | — |
| 11 | 0.5 | VT/GY | 539 | Run/Crank Ignition 1 Voltage | IV | — |
| 12 - 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.5 | RD/BN | 2940 | Battery Positive Voltage | IV | — |
| 15 | 0.5<br>0.5 | VT/WH<br>VT/WH | 1139<br>1139 | Run/Crank Ignition 1 Voltage<br>Run/Crank Ignition 1 Voltage | IV | —<br>DD8/DRZ |

## X51R Fuse Block - Instrument Panel Right X2 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 16 | 0.5 | RD/GN | 5140 | Battery Positive Voltage | IV | — |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.5 | RD/GY | 2140 | Battery Positive Voltage | IV | — |
| 19 | 0.35 | VT/BK | 1639 | Run/Crank Ignition 1 Voltage | III | — |
| 20 - 23 | — | — | — | Not Occupied | — | — |
| 24 | 4 | RD/VT | 542 | Battery Positive Voltage | II | — |
| 25 | 2.5 | RD/GN | 3140 | Battery Positive Voltage | I | — |
| 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.5 | RD/WH | 640 | Battery Positive Voltage | VI | — |
| 28 | 0.35 | RD/GN | 5140 | Battery Positive Voltage | III | — |
| 29 | 0.35 | RD/BU | 540 | Battery Positive Voltage | III | — |
| 30 | 0.35 | RD/GY | 4140 | Battery Positive Voltage | III | — |
| 31 | 1.5 | RD/BN | 4240 | Battery Positive Voltage | IV | — |
| 32 | 2.5 | RD/VT | 4040 | Battery Positive Voltage | IV | — |
| 33 | — | — | — | Not Occupied | — | — |
| 34 | 1 | RD/BU | 2540 | Battery Positive Voltage | IV | — |
| 35 - 36 | — | — | — | Not Occupied | — | — |
| 37 | 0.75 | RD/BN | 2240 | Battery Positive Voltage | V | — |
| 38 | — | — | — | Not Occupied | — | — |
| 39 | 0.35 | RD/VT | 3340 | Battery Positive Voltage | III | — |
| 40 | 0.35 | RD/VT | 3340 | Battery Positive Voltage | III | — |
| 41 | 0.35 | RD/YE | 3040 | Battery Positive Voltage | III | — |
| 42 | 0.5 | RD/BU | 3240 | Battery Positive Voltage | VI | — |
| 43 - 44 | — | — | — | Not Occupied | — | — |
| 45 | 0.5 | RD/WH | 2740 | Battery Positive Voltage | VI | — |
| 46 | 0.35 | RD/GY | 2840 | Battery Positive Voltage | III | — |
| 47 | 0.35 | RD/WH | 1340 | Battery Positive Voltage | III | — |
| 48 | — | — | — | Not Occupied | — | — |

## X51R Fuse Block - Instrument Panel Right X3



4992260

### Connector Part Information

Harness Type: Headliner
OEM Connector: 33297528
Service Connector: 13513732
Description: 14-Way F 150, 280 CTS Series, Sealed (GY)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19119592 | J-35616-4A (PU) | J-38125-557 | Not Available | Not Available | Not Available | Not Available |
| II | 19332365 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19332366 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | 19371175 | J-35616-2A (GY) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |

### X51R Fuse Block - Instrument Panel Right X3

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35 | RD/YE | 240 | Battery Positive Voltage | I | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.5<br>0.35 | WH/VT<br>WH/VT | 1430<br>1430 | Exterior Courtesy Lamp Control<br>Exterior Courtesy Lamp Control | IV<br>IV | QT5/QT6<br>-QT5-QT6 |
| 10 | 0.35 | VT/YE | 43 | Accessory Ignition Voltage | II | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.35 | RD/GN | 3140 | Battery Positive Voltage | II | — |
| 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.35<br>0.35 | VT/WH<br>VT/WH | 1139<br>1139 | Run/Crank Ignition 1 Voltage<br>Run/Crank Ignition 1 Voltage | III<br>I | (DD8/DRZ) +UEU<br>(DD8/DRZ)-UEU |

# X51B Fuse Block - Instrument Panel Auxiliary

—

## Connector Part Information

Harness Type: Auxiliary Instrument Panel
OEM Connector: 33323307
Service Connector: Service by Component Assembly - See Part Catalog
Description: Wire Entry Fuse Block

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-22 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X51B Fuse Block - Instrument Panel Auxiliary

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | YE/BN | 968 | Auxiliary 4 Control | II | — |
| 2 | 2.5 | BU | 965 | Auxiliary 1 Control | II | — |
| 3 | 2.5 | GY/BK | 966 | Auxiliary 2 Control | II | — |
| 4 | 2.5 | BN/WH | 967 | Auxiliary 3 Control | II | — |
| 5 | 2.5 | OG/WH | 968 | Auxiliary 4 Control | II | — |
| 6 | 2.5 | BU | 965 | Auxiliary 1 Control | II | — |
| 7 | 2.5 | GY/BK | 966 | Auxiliary 2 Control | II | — |
| 8 | 2.5 | BN/WH | 967 | Auxiliary 3 Control | II | — |
| 9 | 2.5 | GN/BU | 5989 | Emergency Lamp Relay Contact Control | II | — |
| 10 | 2.5 | GN/BU | 5989 | Emergency Lamp Relay Contact Control | II | — |
| 11 | 2.5 | GN/BU | 5989 | Emergency Lamp Relay Contact Control | II | — |
| 13 | 0.35 | BU | 903 | Battery Positive Voltage | II | — |
| 14 | 0.5 | WH/BK | 5990 | Emergency Lamp Switch Signal | II | — |
| 15 | 2.5 | RD/BU | 42 | Battery Positive Voltage | II | — |
| 16 | 2.5 | RD/BU | 42 | Battery Positive Voltage | II | — |
| 17 | 0.35 | BK | 963 | Auxiliary 3 Switch Signal | II | — |
| 18 | 2.5 | OG/WH | 968 | Auxiliary 4 Control | II | — |
| 20 | 0.35 | BU | 903 | Battery Positive Voltage | II | — |
| 21 | 0.35 | BU | 903 | Battery Positive Voltage | II | — |
| 22 | 2.5 | BN/WH | 967 | Auxiliary 3 Control | II | — |
| 23 | 0.35 | BK | 964 | Auxiliary 4 Switch Signal | II | — |
| 24 | 2.5 | RD/BU | 42 | Battery Positive Voltage | II | — |
| 25 | 2.5 | RD/BU | 42 | Battery Positive Voltage | II | — |
| 26 | 0.35 | BK | 962 | Auxiliary 2 Switch Signal | II | — |
| 27 | 2.5 | BU | 965 | Auxiliary 1 Control | II | — |
| 29 | 0.35 | RD/BU | 42 | Battery Positive Voltage | II | — |
| 30 | 0.35 | RD/BU | 42 | Battery Positive Voltage | II | — |
| 31 | 2.5 | GY/BK | 966 | Auxiliary 2 Control | II | — |
| 32 | 0.35 | BK | 961 | Auxiliary 1 Switch Signal | II | — |

## X51B Fuse Block - Instrument Panel Auxiliary (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 33 | 2.5 | RD/BU | 42 | Battery Positive Voltage | II | — |
| 34 | 0.5 | VT/GN | 39 | Run/Crank Ignition 1 Voltage | II | — |
| 35 | 0.5 | VT/GN | 39 | Run/Crank Ignition 1 Voltage | II | — |
| 36 | 5 | RD/BU | 42 | Battery Positive Voltage | I | — |
| 37 | 0.35 | BU | 903 | Battery Positive Voltage | II | — |
| 38 | 0.35 | RD/BU | 42 | Battery Positive Voltage | II | — |
| 39 | 2.5 | RD/BU | 42 | Battery Positive Voltage | II | — |
| 40 | 2.5 | RD/BU | 42 | Battery Positive Voltage | II | — |
| 41 | 2.5 | RD/BU | 42 | Battery Positive Voltage | II | — |
| 42 | 2.5 | RD/BU | 42 | Battery Positive Voltage | II | — |
| 43 | 2.5 | RD/BU | 42 | Battery Positive Voltage | II | — |

# X54 Fuse Block - Snow Plow (VYU)

—

## Connector Part Information

Harness Type: Snow Plow Jumper
OEM Connector: 33391084
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### X54 Fuse Block - Snow Plow (VYU)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| B4 | — | BN | 25 | Charge Indicator Control | I | — |
| B6 | — | BN | 9026 | — | I | — |
| C4 | — | WH/BU | 9030 | — | I | — |
| C5 | — | BN | 25 | Charge Indicator Control | I | — |

# X55SP Fuse Holder - Snow Plow (VYU)

—

## Connector Part Information

Harness Type: Snow Plow Jumper
OEM Connector: 84129890
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

### Terminal Part Information

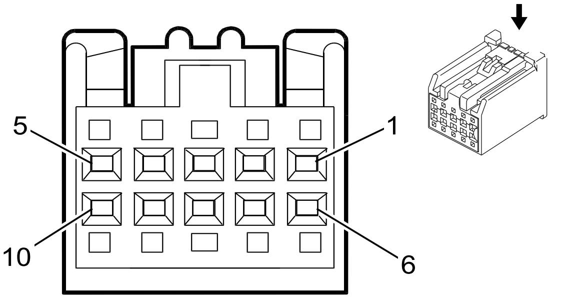
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### X55SP Fuse Holder - Snow Plow (VYU)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| X | — | BN | 9026 | — | I | — |
| Y | — | BN | 9028 | — | I | — |

# Component Connector End Views

## A10 Inside Rearview Mirror X1 (DD8/DRZ)



2180211

### Connector Part Information

Harness Type: Headliner
OEM Connector: 13815336
Service Connector: 13577390
Description: 10-Way F 0.64 Kaizen Series (BK)

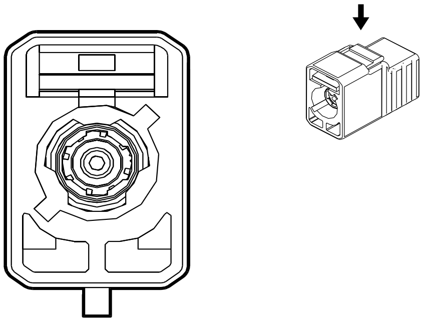
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575867 | J-35616-64B<br>(LT BU) | J-38125-215A | SAIT-A03T-M064 | Yazaki 14 | P | P |

### A10 Inside Rearview Mirror X1 (DD8/DRZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN/WH | 24 | Backup Lamp Control | I | — |
| 2 | 0.35 | VT/WH | 1139 | Run/Crank Ignition 1 Voltage | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.35 | BK/WH | 1851 | Signal Ground | I | — |
| 6 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | BK/YE | 1691 | Automatic Day/Night Mirror Low Reference | I | — |
| 9 | 0.35 | YE/WH | 1690 | Automatic Day/Night Mirror Signal | I | — |
| 10 | — | — | — | Not Occupied | — | — |

# A10 Inside Rearview Mirror X2 (DRZ)



## Connector Part Information

Harness Type: Headliner COAX
OEM Connector: 13594293
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way M Coax Type (BK)

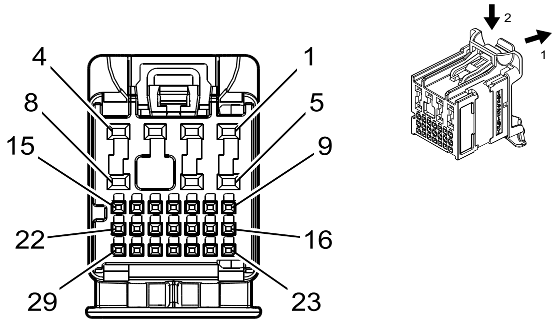
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A10 Inside Rearview Mirror X2 (DRZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | (ISRVM) Camera Video Signal | I | — |

# A11 Radio X1 (IOR)



4584346

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33303653
Service Connector: 13506123
Description: 29-Way F 0.5 NANO, 1.2 MCON Series Sealed (GN)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300649 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19354361 | EL-35616-58 (BK) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

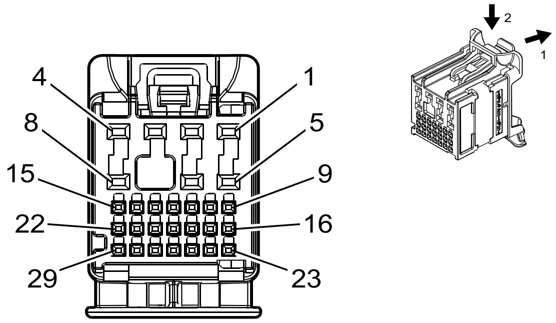
## A11 Radio X1 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | RD/YE | 2340 | Battery Positive Voltage | I | — |
| 2 | 0.75 | RD/YE | 2340 | Battery Positive Voltage | I | — |
| 3 | 0.75 | BK/WH | 2751 | Signal Ground | I | — |
| 4 | 0.35 | BU/RD | 2807 | Radio Keypad Voltage Reference | I | — |
| 5 | 0.35 | BK/GN | 2804 | Radio Display Backlight Low Reference | I | — |
| 6 | 0.75 | BK/WH | 2751 | Signal Ground | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | GN/BK | 116 | Left Rear Speaker Signal (-) | I | — |
| 9 | 0.35 | GY/BU | 2803 | Radio Display Touch Interrupt Request Signal | II | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | GN/WH | 24 | Backup Lamp Control | II | — |
| 12 | 0.35 | GY/GN | 1102 | Low Speed GMLAN Serial Data #2 | II | — |
| 13 - 14 | — | — | — | Not Occupied | — | — |
| 15 | 0.35 | BU/GY | 2808 | Radio Keypad Dimming Control | II | — |
| 16 - 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.35 | GY/VT | 3363 | Navigation Display Dimming Control | II | — |
| 22 | 0.35 | BU/GN | 2813 | Radio Display Backlight Dimming Control | II | — |
| 23 | 0.35 | VT/BU | 6091 | Crankshaft Position Sensor Replicated Signal | II | — |
| 24 | 0.35 | BN/WH | 2809 | Radio Keypad Power Signal | II | — |

## A11 Radio X1 (IOR) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 25 | 0.35 | VT/WH | 2810 | Radio Keypad Button Signal | II | — |
| 26 | 0.35 | BU | 4315 | Radio Volume Up Signal | II | — |
| 27 | 0.35 | GY/BN | 4314 | Radio Volume Down Signal | II | — |
| 28 - 29 | — | — | — | Not Occupied | — | — |

# A11 Radio X1 (IOS/IOT)



4496253

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33303954
Service Connector: 13506123
Description: 29-Way F 0.5 NANO, 1.2 MCON Series Sealed (BK)

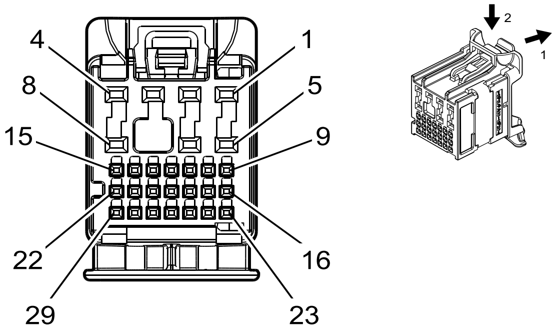
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300649 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19354361 | EL-35616-58 (BK) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19370818 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## A11 Radio X1 (IOS/IOT)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | RD/YE | 2340 | Battery Positive Voltage | I | — |
| 2 | 0.75 | RD/YE | 2340 | Battery Positive Voltage | I | — |
| 3 | 1 | BK/WH | 2751 | Signal Ground | III | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 1 | BK/WH | 2751 | Signal Ground | III | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | GN/BK | 116 | Left Rear Speaker Signal (-) | I | — |
| 9 | 0.35<br>0.35 | GY/YE<br>BU | 5149<br>655 | Voice Recognition Audio Signal<br>Cellular Telephone Microphone Signal | II<br>II | (IOS/IOT)+UE1<br>(IOS/IOT)-UE1 |
| 10 | 0.35<br>0.35 | BK/GY<br>BK/BN | 5152<br>654 | Voice Recognition Audio Low Reference<br>Cellular Telephone Microphone Low Reference | II<br>II | (IOS/IOT)+UE1<br>(IOS/IOT)-UE1 |
| 11 | 0.35 | VT/YE | 7043 | Microphone (+) Signal | II | — |
| 12 | 0.35 | BU/BK | 7044 | Microphone (-) Low Reference | II | — |
| 13 - 29 | — | — | — | Not Occupied | — | — |

# A11 Radio X2 (IOR)



4584398

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33303654
Service Connector: 13506123
Description: 29-Way F 0.5 NANO, 1.2 MCON Series Sealed (GY)

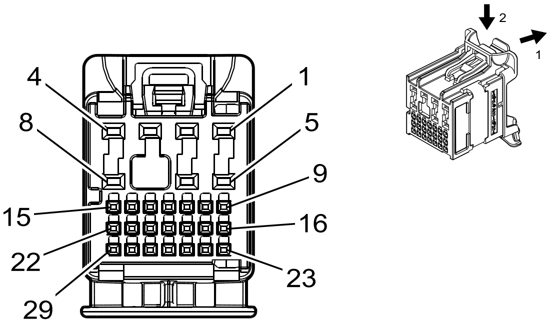
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300649 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19354361 | EL-35616-58 (BK) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## A11 Radio X2 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN | 199 | Left Rear Speaker Control (+) | I | — |
| 2 | 0.75 | BU | 201 | Left Front Speaker Control (+) 1 | I | — |
| 3 | 0.75 | YE | 200 | Right Front Speaker Control (+) 1 | I | — |
| 4 | 0.5 | BU/BK | 115 | Right Rear Speaker Signal (-) | I | — |
| 5 | 0.75 | BN/BU | 118 | Left Front Speaker Signal (-) 1 | I | — |
| 6 | 0.75 | YE/BK | 117 | Right Front Speaker Signal (-) 1 | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | WH | 46 | Right Rear Speaker Control (+) | I | — |
| 9 | 0.35<br>0.35 | BK/GY<br>BK/BN | 5152<br>654 | Voice Recognition Audio Low Reference<br>Cellular Telephone Microphone Low Reference | II<br>II | IOR+UE1<br>IOR-UE1 |
| 10 | 0.35<br>0.35 | GY/YE<br>BU | 5149<br>655 | Voice Recognition Audio Signal<br>Cellular Telephone Microphone Signal | II<br>II | IOR+UE1<br>IOR-UE1 |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.35 | GY/YE | 6972 | Camera Signal 2 + | II | — |
| 13 | 0.35 | WH/BU | 6973 | Camera Signal 2 | II | — |
| 14 - 29 | — | — | — | Not Occupied | — | — |

# A11 Radio X2 (IOS/IOT)



4578560

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33303967
Service Connector: 19355494
Description: 29-Way F 0.5 NANO, 1.2 MCON Series Sealed (GY)

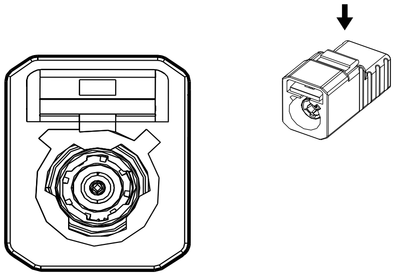
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300649 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19354361 | EL-35616-58 (BK) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## A11 Radio X2 (IOS/IOT)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN | 199 | Left Rear Speaker Control (+) | I | — |
| 2 | 0.75 | BU | 201 | Left Front Speaker Control (+) 1 | I | — |
| 3 | 0.75 | YE/BK | 117 | Right Front Speaker Signal (-) 1 | I | — |
| 4 | 0.5 | BU/BK | 115 | Right Rear Speaker Signal (-) | I | — |
| 5 | 0.75 | BN/BU | 118 | Left Front Speaker Signal (-) 1 | I | — |
| 6 | 0.75 | YE | 200 | Right Front Speaker Control (+) 1 | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | WH | 46 | Right Rear Speaker Control (+) | I | — |
| 9 | 0.35 | BU/GN | 1304 | High Speed GMLAN Serial Data (+)9 | II | — |
| 10 | 0.35 | WH/GN | 1305 | High Speed GMLAN Serial Data (-)9 | II | — |
| 11 | 0.35 | BU/GN | 1304 | High Speed GMLAN Serial Data (+)9 | II | — |
| 12 | 0.35 | WH/GN | 1305 | High Speed GMLAN Serial Data (-)9 | II | — |
| 13 | 0.35 | GN/WH | 24 | Backup Lamp Control | II | — |
| 14 - 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.35 | GY/GN | 1102 | Low Speed GMLAN Serial Data #2 | II | — |
| 19 - 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.35 | WH/BU | 5986 | Serial Data Communication Enable | II | — |
| 29 | — | — | — | Not Occupied | — | — |

# A11 Radio X3 (IOR)



3420249

## Connector Part Information

Harness Type: Antenna COAX
OEM Connector: 13581686
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BK)

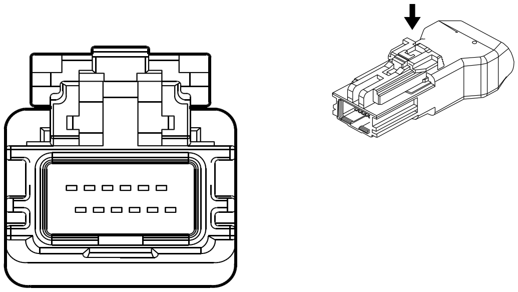
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A11 Radio X3 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | (AM/FM) Antenna RF Signal | I | — |

## A11 Radio X3 (IOS/IOT)



### Connector Part Information

Harness Type: Instrument Panel LVDS
OEM Connector: 35148576
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 12-Way M

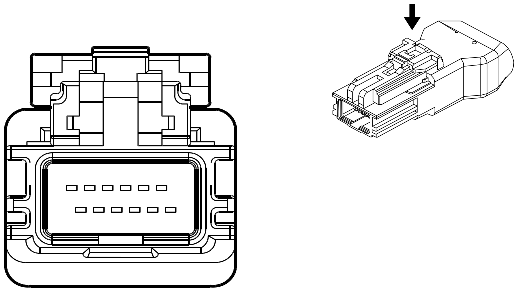
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### A11 Radio X3 (IOS/IOT)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | LVDS | — | (Infotainment) Infotainment Display Signal | I | — |

# A11 Radio X4 ((IOS/IOT)+D07)


4527210

## Connector Part Information

Harness Type: Instrument Panel LVDS
OEM Connector: 35149509
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A11 Radio X4 ((IOS/IOT)+D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | LVDS | — | (Infotainment) Infotainment Display Signal | I | — |

# A11 Radio X4 (IOR+(UIR/UIJ))

—

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35149722
Service Connector: Not Available
Description: 1-Way

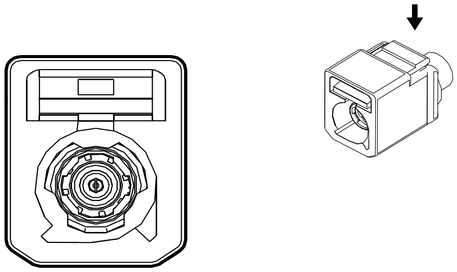
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A11 Radio X4 (IOR+(UIR/UIJ))

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| BK | — | — | LVDS | LVDS Cable | I | — |

# A11 Radio X5 (UVB/UVI/UV2)



4895598

## Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 35097347
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F

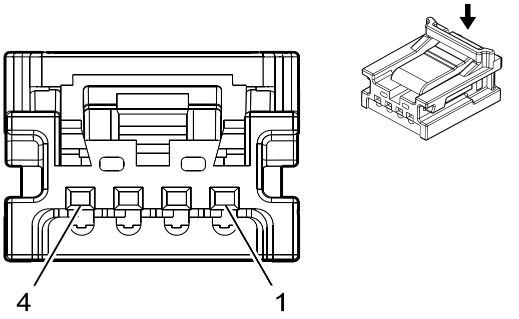
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A11 Radio X5 (UVB/UVI/UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | Coaxial Camera Signal | I | — |

# A11 Radio X6 (IOR)



4215060

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33228283
Service Connector: 19354840
Description: 4-Way F Mini 50 Series (BK)

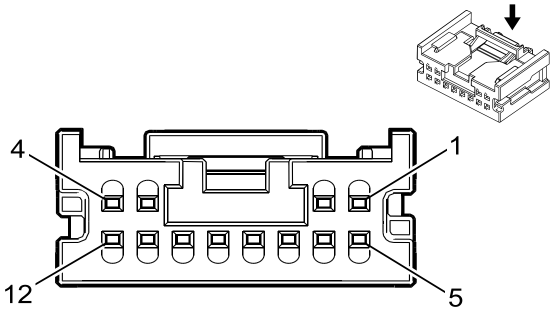
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | EL-35616-58 (BK) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A11 Radio X6 (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.35 | GY/WH | 7211 | Ethernet Bus 4 (+) | I | — |
| 3 | 0.35 | GY | 7210 | Ethernet Bus 4 (-) | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# A11 Radio X6 (IOS/IOT)



3824362

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33235297
Service Connector: 13507121
Description: 12-Way F Mini 50 Series (BK)

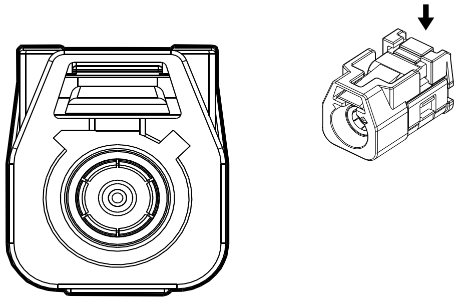
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19333221 | EL-35616-58 (BK) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## A11 Radio X6 (IOS/IOT)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | GY/BU | 7217 | Ethernet Bus 7 (+) | I | — |
| 4 | 0.35 | BN/BU | 7216 | Ethernet Bus 7 (-) | I | — |
| 5 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | GY/BK | 7215 | Ethernet Bus 6 (+) | I | — |
| 9 | 0.35 | BN/BK | 7214 | Ethernet Bus 6 (-) | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | GY/WH | 7211 | Ethernet Bus 4 (+) | I | — |
| 12 | 0.35 | GY | 7210 | Ethernet Bus 4 (-) | I | — |

# A11 Radio X7 (IOS/IOT)



3530700

## Connector Part Information

Harness Type: Antenna COAX

OEM Connector: 13583834

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A11 Radio X7 (IOS/IOT)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | (AM/FM) Antenna RF Signal | I | — |

# A11 Radio X8 ((IOS/IOT)-UE1)

—

## Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: Not Available
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type

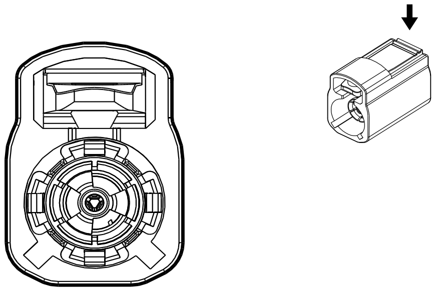
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### A11 Radio X8 ((IOS/IOT)-UE1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | (GPS only) Coaxial Antenna GPS Signal | I | — |

# A11 Radio X8 (IOR+U2K)



4044034

## Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 35150035
Service Connector: Service by Cable Assembly — See Part Catalog
Description: —

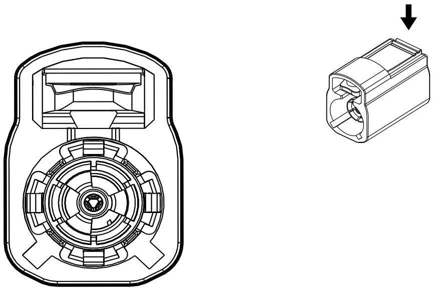
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A11 Radio X8 (IOR+U2K)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | (XM +/-HD) Coaxial Antenna XM Signal | I | — |

# A11 Radio X9 ((IOS/IOT)+U2K)



4044034

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35150036
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type

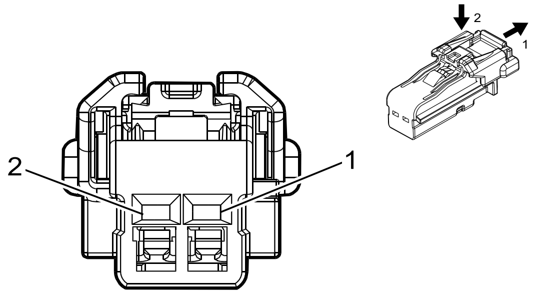
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A11 Radio X9 ((IOS/IOT)+U2K)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | (XM +/-HD) Coaxial Antenna XM Signal | I | — |

# A14D Seat Lumbar Support Pump - Driver (A2X-A45)



4115691

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-8431
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

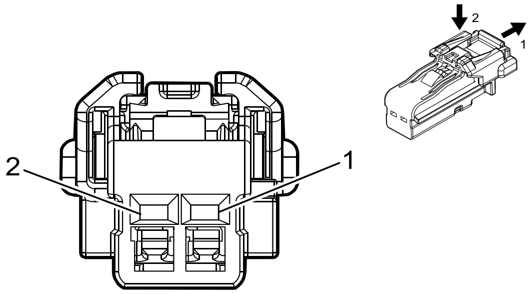
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A14D Seat Lumbar Support Pump - Driver (A2X-A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU | 611 | Driver Power Seat Lumbar Motor Forward Control | I | — |
| 2 | 0.75 | VT | 610 | Driver Power Seat Lumbar Motor Rearward Control | I | — |

# A14P Seat Lumbar Support Pump - Passenger (A7K)



4115691

## Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-8431
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

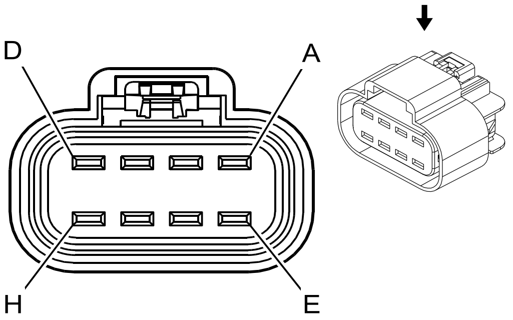
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A14P Seat Lumbar Support Pump - Passenger (A7K)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU | 211 | Passenger Power Seat Lumbar Motor Forward Control | I | — |
| 2 | 0.75 | VT | 210 | Passenger Power Seat Lumbar Motor Rearward Control | I | — |

# A16 Transfer Case Motor (NP0/NQH)



646372

## Connector Part Information

Harness Type: Engine
OEM Connector: 13538370
Service Connector: 19329743
Description: 8-Way F 280 GT Series, Sealed (BK)

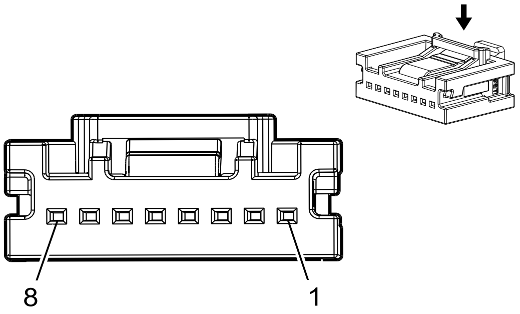
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A16 Transfer Case Motor (NP0/NQH)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 3 | YE/GY | 1552 | Transfer Case Motor Clockwise Control | I | — |
| B | 0.75 | BK | 952 | Transfer Case Lock Solenoid 12V Reference | I | — |
| C | 0.75 | YE/BN | 1569 | Transfer Case Lock Solenoid Control | I | — |
| D | 3 | YE/VT | 1553 | Transfer Case Motor Counter Clockwise Control | I | — |
| E | 0.5 | YE | 7474 | Incremental Encoder Direction Signal | I | — |
| F | 0.5 | BU/GY | 7473 | Incremental Encoder Impulse Signal | I | — |
| G | 0.5 | WH/GN | 7475 | Incremental Encoder Sensor 8V Reference | I | — |
| H | 0.5 | VT | 7476 | Incremental Encoder Sensor Low Reference | I | — |

# A22 Radio Controls (IOR)



4017639

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33227522
Service Connector: 19354223
Description: 8-Way F Mini 50 Series (BK)

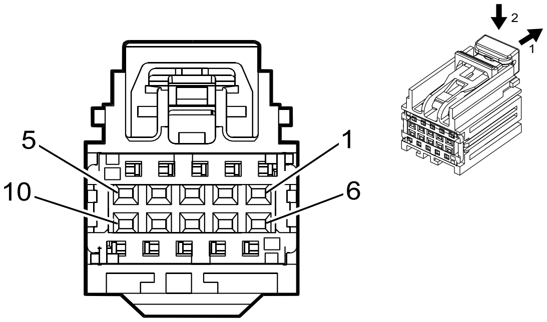
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | EL-35616-58 (BK) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A22 Radio Controls (IOR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU/RD | 2807 | Radio Keypad Voltage Reference | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | BN/WH | 2809 | Radio Keypad Power Signal | I | — |
| 4 | 0.35 | BK/YE | 2806 | Radio Keypad Low Reference | I | — |
| 5 | 0.35 | BU/GY | 2808 | Radio Keypad Dimming Control | I | — |
| 6 | 0.35 | VT/WH | 2810 | Radio Keypad Button Signal | I | — |
| 7 | 0.35 | BU | 4315 | Radio Volume Up Signal | I | — |
| 8 | 0.35 | GY/BN | 4314 | Radio Volume Down Signal | I | — |

# A23D Door Latch Assembly - Driver



### Connector Part Information

Harness Type: Driver Door
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 YESC Kaizen Series (GN)

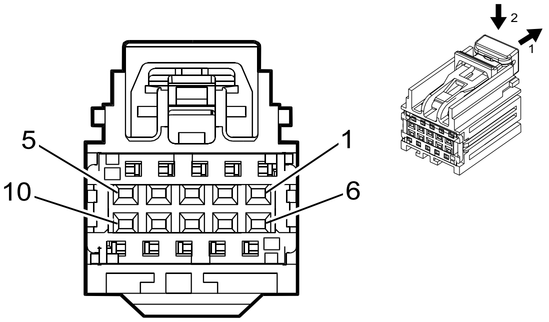
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A23D Door Latch Assembly - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5<br>0.5 | GY<br>PK | 745<br>745 | Left Front Door Ajar Switch Signal<br>Left Front Door Ajar Switch Signal | I<br>I | A6Q<br>AXG |
| 2 | 0.5 | WH/YE | 3574 | Driver Door Open Switch Signal | I | — |
| 3 | 0.75 | BK | 1150 | Ground | I | — |
| 4 | 0.35 | WH/VT | 3270 | Driver Door Lock Motor Status Signal | I | — |
| 5 | 0.5 | BU/VT | 1124 | Door Lock Key Switch Unlock Signal | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.75 | GY | 5911 | Door Lock Actuator Lock Control 2 | I | — |
| 8 | 0.75 | BN/YE | 294 | Door Lock Actuator Unlock Control | I | — |
| 9 - 10 | — | — | — | Not Occupied | — | — |

# A23LR Door Latch Assembly - Left Rear (AU3)



## Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 YESC Kaizen Series (GN)

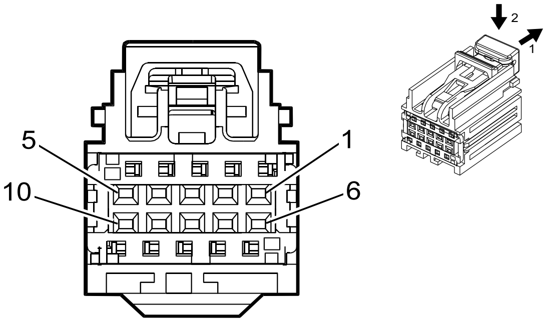
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A23LR Door Latch Assembly - Left Rear (AU3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5<br>0.5 | GN<br>GY | 747<br>747 | Left Rear Door Ajar Switch Signal<br>Left Rear Door Ajar Switch Signal | I<br>I | AEQ<br>AU3 |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | BK | 1150 | Ground | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.75 | GY | 295 | Door Lock Actuator Lock Control | I | — |
| 8 | 0.75 | BN/YE | 294 | Door Lock Actuator Unlock Control | I | — |
| 9 - 10 | — | — | — | Not Occupied | — | — |

# A23P Door Latch Assembly - Passenger (AU3)



4622549

### Connector Part Information

Harness Type: Passenger Door
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 YESC Kaizen Series (GN)

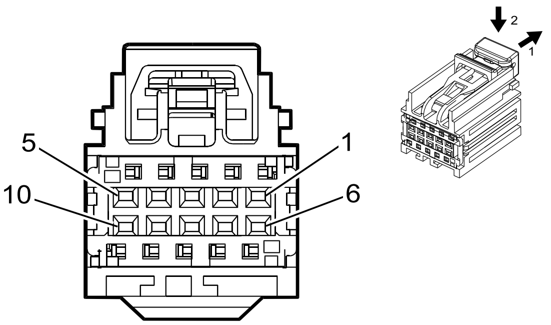
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A23P Door Latch Assembly - Passenger (AU3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | BK | 1250 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.35 | GY | 746 | Right Front Door Ajar Switch Signal | I | AU3 |
| 6 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.75 | BN/YE | 294 | Door Lock Actuator Unlock Control | I | — |
| 9 | 0.75 | GY | 295 | Door Lock Actuator Lock Control | I | — |
| 10 | — | — | — | Not Occupied | — | — |

# A23RR Door Latch Assembly - Right Rear



4622549

## Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 33320811
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 YESC Kaizen Series (GN)

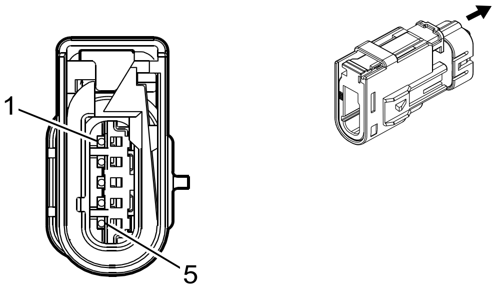
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A23RR Door Latch Assembly - Right Rear

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | BK | 1250 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | GN | 748 | Right Rear Door Ajar Switch Signal | I | — |
| 6 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.75 | BN/YE | 294 | Door Lock Actuator Unlock Control | I | — |
| 9 | 0.75 | GY | 295 | Door Lock Actuator Lock Control | I | — |
| 10 | — | — | — | Not Occupied | — | — |

# A24D Door Handle Assembly - Driver Exterior



4808321

## Connector Part Information

Harness Type: Driver Door
OEM Connector: 35028909
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed (NA)

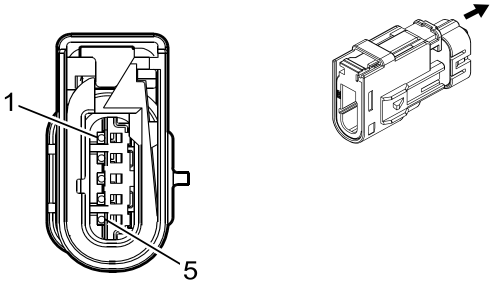
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A24D Door Handle Assembly - Driver Exterior

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/WH | 3570 | Driver Door Handle Switch Signal | I | — |
| 2 | 0.5 | VT | 3560 | Passive Entry Driver Door Antenna Signal Hi | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | VT/GY | 3561 | Passive Entry Driver Door Antenna Signal Lo | I | — |
| 5 | 0.75 | BK | 1150 | Ground | I | — |

# A24LR Door Handle Assembly - Left Rear Exterior (BTM)



4808325

## Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 35028907
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed (BK)

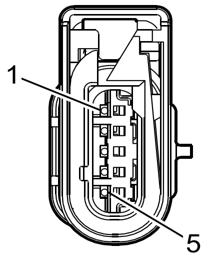
## Terminal Part Information

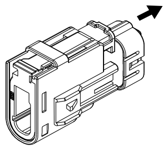
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A24LR Door Handle Assembly - Left Rear Exterior (BTM)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | PK | 6157 | Left Rear Door Handle Switch Signal | I | — |
| 2 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.75 | BK | 1150 | Ground | I | — |

# A24P Door Handle Assembly - Passenger Exterior





4808321

## Connector Part Information

Harness Type: Passenger Door
OEM Connector: 35028909
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed (NA)

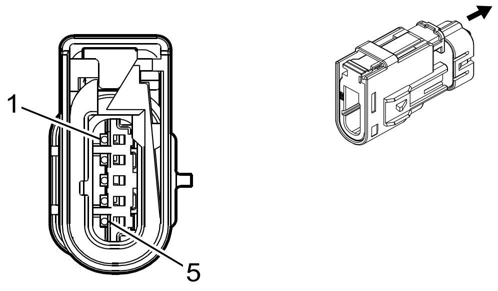
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A24P Door Handle Assembly - Passenger Exterior

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/WH | 3571 | Passenger Door Handle Switch Signal | I | — |
| 2 | 0.5 | GN/YE | 3562 | Passive Entry Passenger Door Antenna Signal Hi | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | GN/BK | 3563 | Passive Entry Passenger Door Antenna Signal Lo | I | — |
| 5 | 0.75 | BK | 1250 | Ground | I | — |

# A24RR Door Handle Assembly - Right Rear Exterior (BTM)



4808325

## Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 35028907
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed (BK)

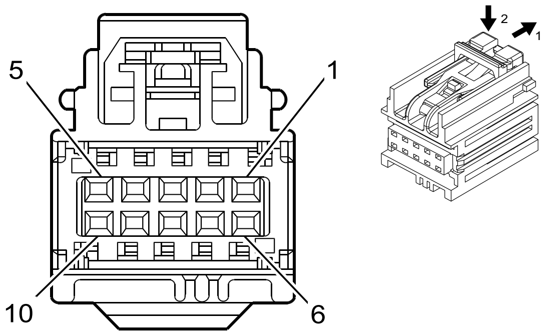
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A24RR Door Handle Assembly - Right Rear Exterior (BTM)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/GY | 6158 | Right Rear Door Handle Switch Signal | I | — |
| 2 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.75 | BK | 1250 | Ground | I | — |

# A26 HVAC Controls



4822741

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33353271
Service Connector: 13509648
Description: 10-Way F 0.64 YESC Kaizen Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575742 | J-35616-64B (LT BU) | J-38125-215A | SAIT-A03T-M064 | Yazaki 14 | P | P |
| II | 13575867 | J-35616-64B (LT BU) | J-38125-215A | SAIT-A03T-M064 | Yazaki 14 | P | P |
| III | 19300631 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## A26 HVAC Controls

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD/WH | 1340 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | GN | 5060 | Low Speed GMLAN Serial Data | II | — |
| 4 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.35 | GN/YE | 7531 | Local Interconnect Network Serial Data Bus 9 | III | — |
| 10 | 0.5 | BK/WH | 1851 | Signal Ground | I | — |

# A38 Reductant Pump and Sensor Assembly (LM2)

—

## Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 33210848
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F

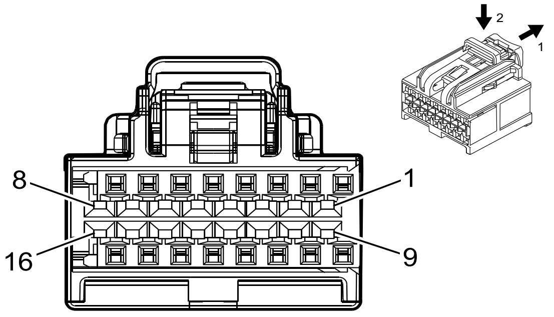
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### A38 Reductant Pump and Sensor Assembly (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | — | — | I | — |
| 2 | 0.5 | BN | — | — | I | — |
| 3 | 0.5 | BU | — | — | I | — |
| 4 | 0.5 | BU | — | — | I | — |
| 5 | 0.5 | BN | — | — | I | — |
| 7 | 1.0 | WH | — | — | I | — |
| 8 | 1.0 | BN | — | — | I | — |
| 9 | 1.0 | YE | — | — | I | — |
| 10 | 0.5 | BN | — | — | I | — |
| 11 | 1.0 | BU | — | — | I | — |
| 14 | 1.0 | BU | — | — | I | — |
| 15 | 1.0 | BN | — | — | I | — |
| 16 | 1.0 | YE | — | — | I | — |

# A98 Front Overhead Console Assembly X1



4873254

## Connector Part Information

Harness Type: Headliner
OEM Connector: 35016344
Service Connector: 13519739
Description: 16-Way F 0.64 OCS Series (GY)

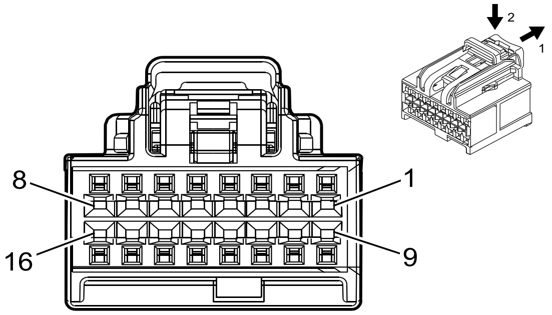
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300660 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## A98 Front Overhead Console Assembly X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GY | 157 | Interior Lamp Control | I | — |
| 2 | 0.5 | WH/BN | 6815 | Inadvertent Power Control | I | — |
| 3 | 0.35 | WH | 6816 | Indicator Dimming Control | I | — |
| 4 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 5 | 0.35 | BK | 1050 | Ground | I | — |
| 6 | 0.35 | BU | 2307 | Passenger Air Bag On Indicator Control | I | — |
| 7 | 0.35 | GN | 2308 | Passenger Air Bag Off Indicator Control | I | — |
| 8 | 0.35 | VT/WH | 1139 | Run/Crank Ignition 1 Voltage | I | — |
| 9 | 0.35 | VT/WH | 5234 | Passenger Seat Belt Indicator Control | I | — |
| 10 | 0.35 | GY | 156 | Courtesy Lamp Switch Signal | I | — |
| 11 | 0.35 | GY/GN | 328 | Interior Lamp Defeat Switch Signal | I | — |
| 12 | 0.35 | BK/WH | 1851 | Signal Ground | I | — |
| 13 | 0.35 | BU/GY | 4672 | Dome Lamp Off Indicator Control | I | — |
| 14 | 0.35 | VT/GN | 7558 | LED Ambient Lighting Control 2 | I | — |
| 15 - 16 | — | — | — | Not Occupied | — | — |

# A98 Front Overhead Console Assembly X2



4873243

## Connector Part Information

Harness Type: Headliner
OEM Connector: 35016343
Service Connector: 13519738
Description: 16-Way F 0.64 OCS Series (BK)

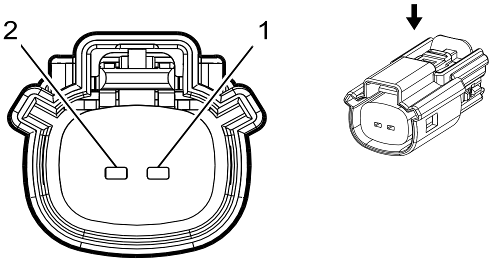
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300660 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## A98 Front Overhead Console Assembly X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE/VT | 2516 | Keypad Green LED Control | I | — |
| 2 | 0.35 | BN/WH | 2517 | Keypad Red LED Control | I | — |
| 3 | 0.35 | GN/WH | 2514 | Keypad Signal | I | — |
| 4 | 0.35 | GN/BK | 2515 | Keypad Control | I | — |
| 5 | 0.35 | YE/VT | 6191 | Power Sliding Window Switch Open Signal | I | — |
| 6 | 0.35 | WH | 6192 | Power Sliding Window Switch Close Signal | I | — |
| 7 | 0.35 | VT/YE | 43 | Accessory Ignition Voltage | I | — |
| 8 | 0.35 | RD/YE | 240 | Battery Positive Voltage | I | — |
| 9 | 0.35 | BU/VT | 5027 | Sunroof Switch Data 1 Signal | I | — |
| 10 | 0.35 | WH/GN | 3031 | Sunroof Vent Switch Signal | I | — |
| 11 | 0.35 | BK/GY | 128 | Sunroof Switch Low Reference | I | — |
| 12 - 16 | — | — | — | Not Occupied | — | — |

# A99L Pickup Box Endgate Latch - Left (QK2)



2474713

## Connector Part Information

Harness Type: Endgate
OEM Connector: 13782480
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series, Sealed (BK)

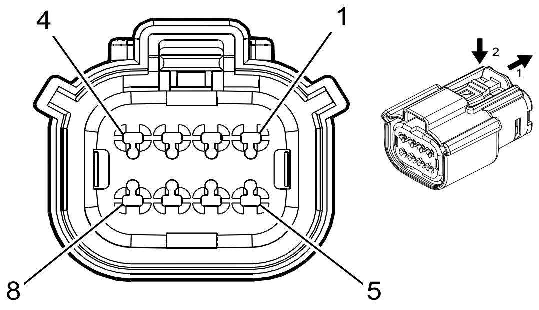
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A99L Pickup Box Endgate Latch - Left (QK2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN | 1299 | Major Endgate Motor Supply Voltage | I | — |
| 2 | 0.5 | YE/BK | 7730 | Major Endgate Motor Return | I | — |

# A99L Pickup Box Endgate Latch - Left (QT6)



4846407

## Connector Part Information

Harness Type: Endgate
OEM Connector: 35037827
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 MX Series, Sealed (BK)

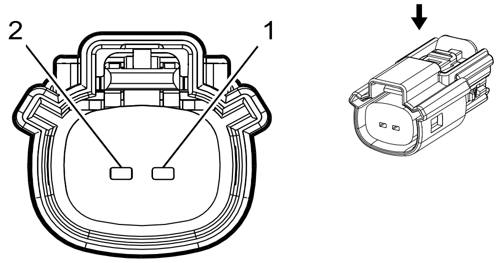
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A99L Pickup Box Endgate Latch - Left (QT6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.5 | GY/VT | 4678 | Rear Closure Ajar Switch Signal 1 | I | — |
| 3 | 0.35 | BU/BK | 4665 | Rear Closure Ajar Switch Signal 2 | I | — |
| 4 | 0.5 | BK/VT | 4656 | Rear Closure Object Sensor Low Reference | I | — |
| 5 | 1 | BN | 4681 | Rear Closure Cinch Latch Motor Open Control | I | — |
| 6 | 1 | BU/GY | 4682 | Rear Closure Cinch Latch Motor Close Control | I | — |
| 7 | 0.35 | GN/BK | 4659 | Rear Closure Open | I | — |
| 8 | 0.5 | PK/BK | 4668 | Rear Closure Ajar Switch Signal 3 | I | — |

# A99R Pickup Box Endgate Latch - Right (QK2)



2474713

## Connector Part Information

Harness Type: Endgate
OEM Connector: 13782480
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series, Sealed (BK)

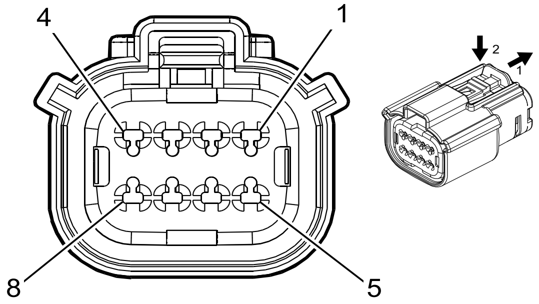
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### A99R Pickup Box Endgate Latch - Right (QK2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN | 1299 | Major Endgate Motor Supply Voltage | I | — |
| 2 | 0.5 | YE/BK | 7730 | Major Endgate Motor Return | I | — |

# A99R Pickup Box Endgate Latch - Right (QT6)



4846407

## Connector Part Information

Harness Type: Endgate
OEM Connector: 35037827
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 MX Series, Sealed (BK)

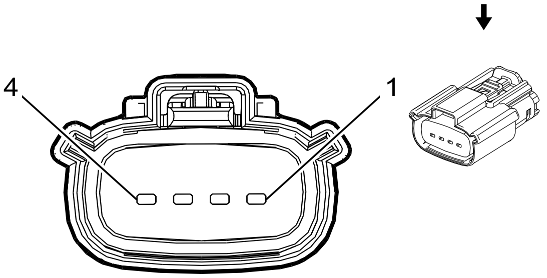
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### A99R Pickup Box Endgate Latch - Right (QT6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/BK | 1575 | Rear Closure Sensor Low Reference 2 | I | — |
| 2 | 0.35 | YE/RD | 7734 | Rear Closure Latch 2 Rachet Status | I | — |
| 3 | 0.5 | VT | 7736 | Rear Closure Latch 2 Unlatch Status | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | WH | 7735 | Rear Closure Latch 2 Pawl Status | I | — |
| 6 | 0.35 | OG | 7733 | Rear Closure Latch 2 Sector Status | I | — |
| 7 | 1 | PK | 1499 | Rear Closure Cinch Latch Motor 2 Cinch Control | I | — |
| 8 | 1 | BU | 1509 | Rear Closure Cinch Latch Motor 2 Release Control | I | — |

# A100L Pickup Box Auxiliary Endgate Latch - Left (QK2)



2474747

## Connector Part Information

Harness Type: Endgate
OEM Connector: 13815807
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 MX Series, Sealed (BK)

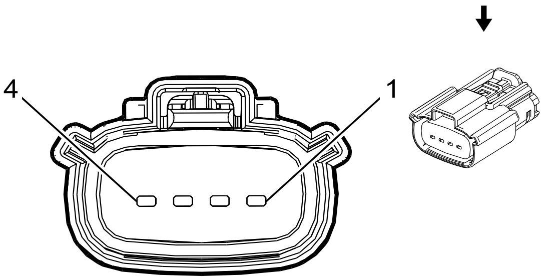
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A100L Pickup Box Auxiliary Endgate Latch - Left (QK2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/BU | 7295 | Left Minor Endgate Ajar Signal | I | — |
| 2 | 0.75 | BK | 1450 | Ground | I | — |
| 3 | 0.5 | BN/BK | 7726 | Minor Endgate Motor Return | I | — |
| 4 | 0.5 | VT | 7725 | Minor Endgate Motor Supply Voltage | I | — |

# A100R Pickup Box Auxiliary Endgate Latch - Right (QK2)



2474747

## Connector Part Information

Harness Type: Endgate
OEM Connector: 13815807
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 MX Series, Sealed (BK)

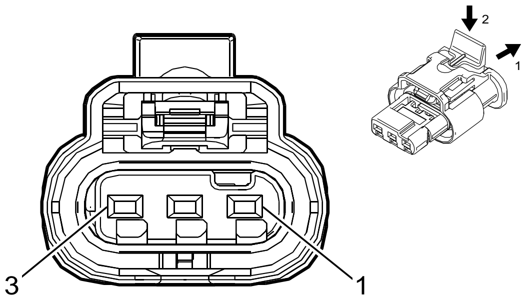
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## A100R Pickup Box Auxiliary Endgate Latch - Right (QK2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/BK | 7726 | Minor Endgate Motor Return | I | — |
| 2 | 0.5 | VT | 7725 | Minor Endgate Motor Supply Voltage | I | — |
| 3 | 0.35 | WH/BN | 7296 | Right Minor Endgate Ajar Signal | I | — |
| 4 | 0.75 | BK | 1450 | Ground | I | — |

# B1 A/C Refrigerant Pressure Sensor



4249125

## Connector Part Information

Harness Type: Engine
OEM Connector: 33176362
Service Connector: 19352065
Description: 3-Way F 1.2 MCP Series, Sealed (BK)

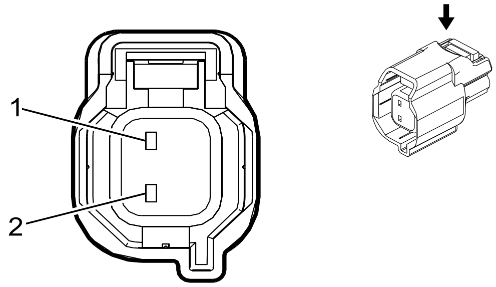
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B1 A/C Refrigerant Pressure Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 2 | 0.5 | GN | 380 | A/C Refrigerant Pressure Sensor Signal | I | — |
| 3 | 0.5 | BK/GY | 626 | Engine Control Sensors Low Reference (3) | I | — |

# B5LF Wheel Speed Sensor - Left Front



2900396

## Connector Part Information

Harness Type: Chassis
OEM Connector: 15503634
Service Connector: 19366856
Description: 2-Way F 1.5 Series (L-GY)

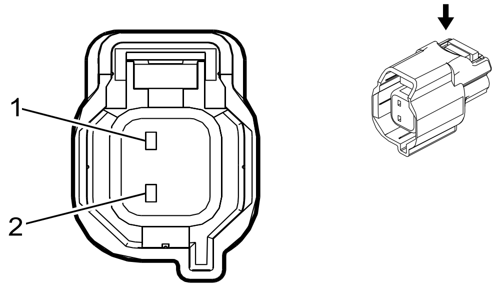
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B5LF Wheel Speed Sensor - Left Front

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/WH | 7064 | Wheel Speed Sensor Control Left Front | I | — |
| 2 | 0.5 | GY | 830 | Wheel Speed Sensor Signal Left Front | I | — |

# B5LR Wheel Speed Sensor - Left Rear



2900396

## Connector Part Information

Harness Type: Chassis
OEM Connector: 15503634
Service Connector: 19366856
Description: 2-Way F 1.5 Series (L-GY)

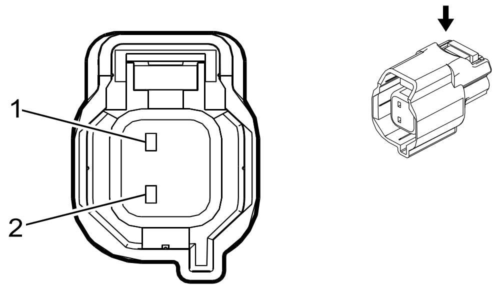
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B5LR Wheel Speed Sensor - Left Rear

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/BK | 7127 | Wheel Speed Sensor Control Left Rear | I | — |
| 2 | 0.5 | BU | 884 | Wheel Speed Sensor Signal Left Rear | I | — |

## B5RF Wheel Speed Sensor - Right Front



2900396

### Connector Part Information

Harness Type: Chassis
OEM Connector: 15503634
Service Connector: 19366856
Description: 2-Way F 1.5 Series (L-GY)

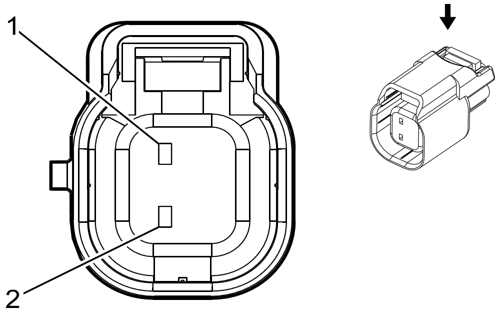
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B5RF Wheel Speed Sensor - Right Front

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/BN | 7065 | Wheel Speed Sensor Control Right Front | I | — |
| 2 | 0.5 | YE | 872 | Wheel Speed Sensor Signal Right Front | I | — |

# B5RR Wheel Speed Sensor - Right Rear



4115616

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33122852
Service Connector: 19366860
Description: 2-Way F 1.5 Series, Sealed (BK)

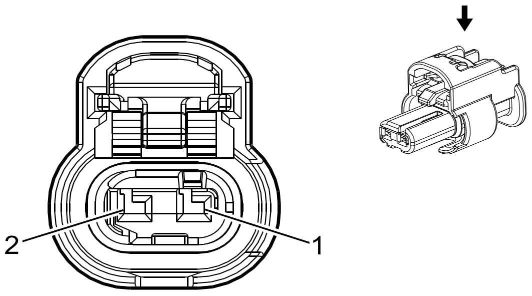
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B5RR Wheel Speed Sensor - Right Rear

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/YE | 7128 | Wheel Speed Sensor Control Right Rear | I | — |
| 2 | 0.5 | VT | 882 | Wheel Speed Sensor Signal Right Rear | I | — |

# B9 Ambient Air Temperature Sensor



4649903

## Connector Part Information

Harness Type: Passenger Outside Rearview Mirror
OEM Connector: 13512365
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

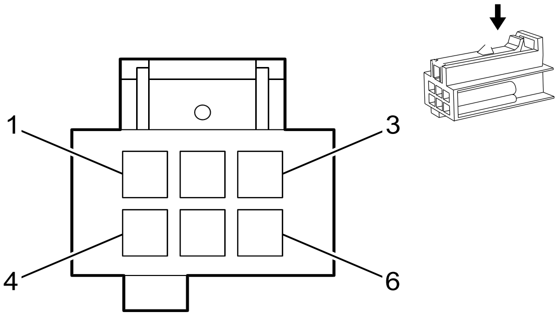
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B9 Ambient Air Temperature Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BU/GY | 636 | Outside Ambient Air Temperature Sensor Signal | I | — |
| 2 | — | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |

## B10B Ambient Light/Sunload Sensor



2282896

### Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15338980
Service Connector: 19333315
Description: 6-Way F 0.64 Micro-Quadlock Series (BK)

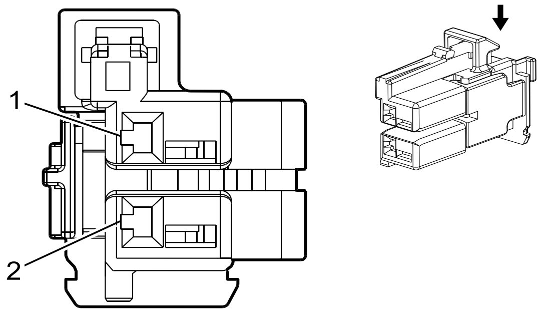
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B10B Ambient Light/Sunload Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GY | 590 | Solar Sensor Driver Signal | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | WH/BU | 278 | Ambient Light Sensor Signal | I | — |
| 4 | 0.35 | BU/WH | 734 | Inside Air Temperature Sensor Signal | I | — |
| 5 | 0.35 | GY | 728 | Security Indicator Control | I | — |
| 6 | 0.35 | BK/GN | 7567 | Solar Sensor Low Reference | I | — |

# B13 Transmission Fluid Temperature Sensor (MQB)



4672650

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

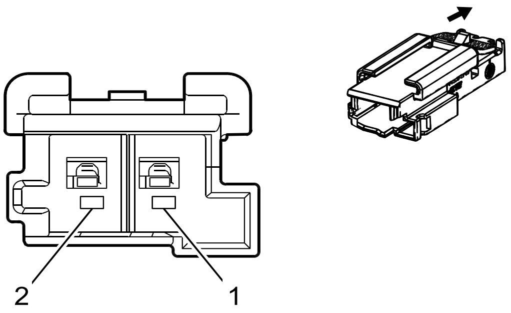
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B13 Transmission Fluid Temperature Sensor (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/BN | 586 | Transmission Oil Temperature Sensor Low Reference | I | — |
| 2 | 0.5 | BN/YE | 585 | Transmission Oil Temperature Sensor Signal | I | — |

# B14A Transmission Output Shaft Speed Sensor (MQB)



4672593

## Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2272160-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (BU)

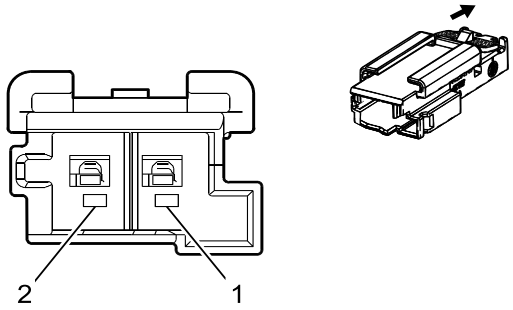
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | - | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B14A Transmission Output Shaft Speed Sensor (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5<br>0.5 | YE/OG<br>YE/OG | 6358<br>6358 | Output Speed Signal<br>Output Speed Signal | I<br>II | —<br>— |
| 2 | 0.5<br>0.5 | GN<br>GN | 4170<br>4170 | Transmission Position Sensor B 9V Reference<br>Transmission Position Sensor B 9V Reference | I<br>II | —<br>— |

# B14C Transmission Input Shaft Speed Sensor (MQB)



## Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2272160-3
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (GN)

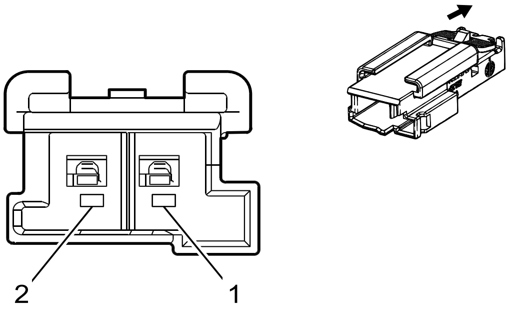
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | - | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B14C Transmission Input Shaft Speed Sensor (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/VT | 6353 | Input Speed Signal | I | — |
| 2 | 0.5 | BU | 4171 | Transmission Position Sensor A 9V Reference | I | — |

# B14DA Transmission Intermediate Speed Sensor 1 (MQB)



4663490

## Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2272160-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (NA)

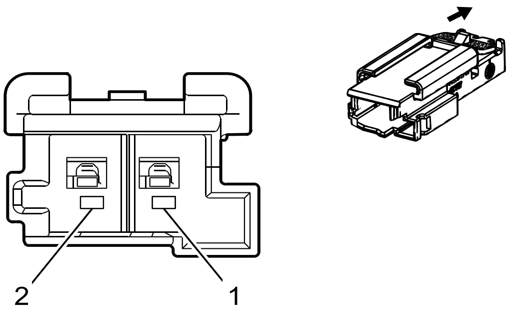
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | - | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B14DA Transmission Intermediate Speed Sensor 1 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/GN | 4510 | Transmission Intermediate Speed Signal | I | — |
| 2 | 0.5 | GN | 4170 | Transmission Position Sensor B 9V Reference | I | — |

# B14DB Transmission Intermediate Speed Sensor 2 (MQB)



4672593

## Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2272160-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (BU)

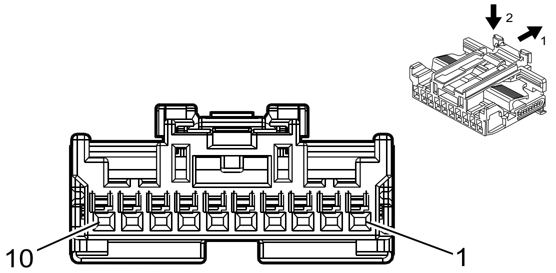
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | - | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B14DB Transmission Intermediate Speed Sensor 2 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/BU | 4510 | Transmission Intermediate Speed Signal | I | — |
| 2 | 0.5 | BU | 4171 | Transmission Position Sensor A 9V Reference | I | — |

## B15 Transmission Internal Mode Switch (MQE)



4051038

### Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2138504-1
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 0.64 Generation Y Series (BN)

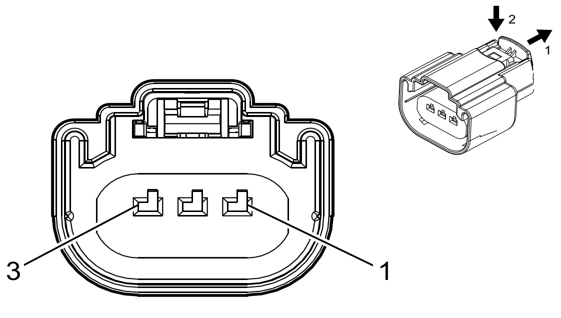
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | - | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B15 Transmission Internal Mode Switch (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/GY | 1786 | Transmission Park/Neutral Signal 1 | I | — |
| 2 | 0.5 | BK/GY | 3927 | IMS Mode Switch Low Reference | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | YE/BU | 4171 | Transmission Position Sensor A 9V Reference | I | — |
| 5 | 0.5 | VT/WH | 5981 | PRNDL A Signal | I | — |
| 6 | 0.5 | WH/BK | 5983 | PRNDL C Signal | I | — |
| 7 | 0.5 | GY/YE | 4169 | PRNDL S Signal | I | — |
| 8 | 0.5 | GY/BN | 5982 | PRNDL B Signal | I | — |
| 9 | 0.5 | GY/WH | 4168 | PRNDL P Signal | I | — |
| 10 | 0.5 | YE/GN | 4170 | Transmission Position Sensor B 9V Reference | I | — |

## B18 Battery Current Sensor (-KL9)



4569745

### Connector Part Information

Harness Type: Body
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 150 MX Series, Sealed (BK)

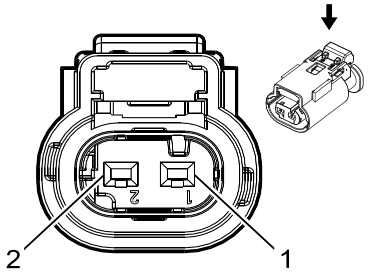
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B18 Battery Current Sensor (-KL9)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU/VT | 5076 | Current Sensor Control | I | — |
| 2 | 0.35 | BK/VT | 5077 | Current Sensor Low Reference | I | — |
| 3 | 0.35 | WH/YE | 5075 | Current Sensor Signal | I | — |

# B20 Brake Fluid Level Switch



2717066

## Connector Part Information

Harness Type: Body
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

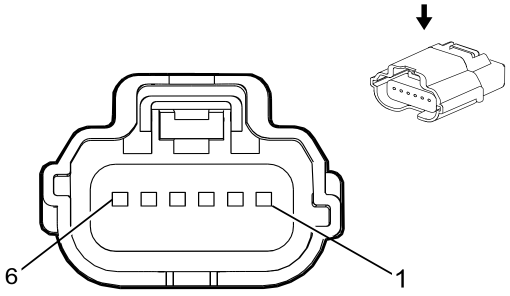
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B20 Brake Fluid Level Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/GY | 333 | Brake Fluid Level Sensor Signal | I | — |
| 2 | 0.75 | BK | 150 | Ground | I | J61 |

# B22 Brake Pedal Position Sensor



3270302

## Connector Part Information

Harness Type: Body
OEM Connector: 13893502
Service Connector: 19304011
Description: 6-Way F 64 Series, Sealed (NA)

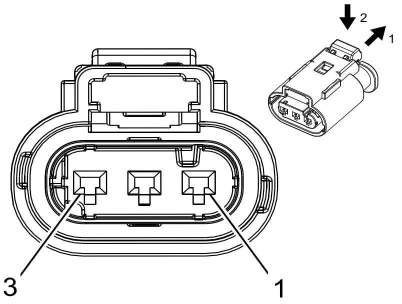
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B22 Brake Pedal Position Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK/BN | 5360 | Brake Apply Sensor Low Reference | I | — |
| 2 | 0.35 | WH | 5359 | Brake Apply Sensor Control | I | — |
| 3 | 0.35 | BU/YE | 5361 | Brake Apply Sensor Signal | I | — |
| 4 | 0.35 | WH/GN | 5380 | Brake Position Sensor Signal | I | — |
| 5 | 0.35 | BK/YE | 5382 | Brake Position Sensor Low Reference | I | — |
| 6 | 0.35 | WH/RD | 5381 | Brake Position Sensor 5V Reference | I | — |

## B23 Camshaft Position Sensor (L82/L84/L87)



2717069

### Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 13763990
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

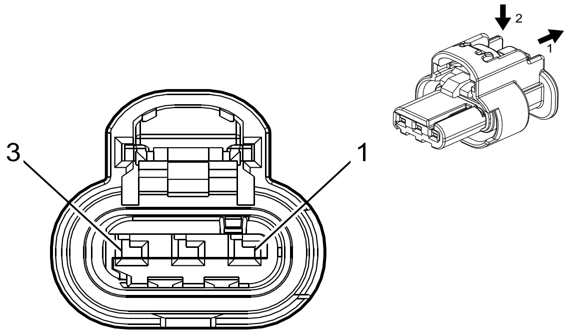
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B23 Camshaft Position Sensor (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/BU | 5300 | Camshaft Position Intake Sensor Control 1 | I | — |
| 2 | 0.5 | BK/GN | 5301 | Camshaft Position Intake Sensor Low Reference 1 | I | — |
| 3 | 0.5 | YE/VT | 5275 | Camshaft Position Intake Sensor 1 | I | — |

# B23 Camshaft Position Sensor (LM2)



4581126

## Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

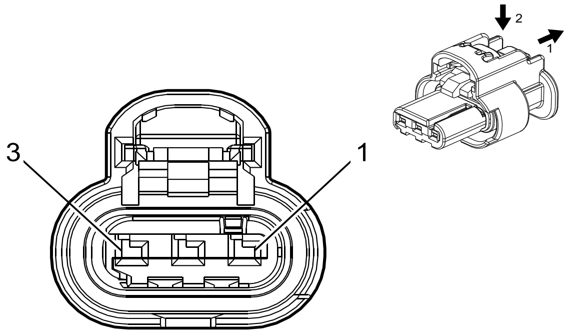
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B23 Camshaft Position Sensor (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/YE | 5297 | Camshaft Position Exhaust Sensor Control 1 | I | — |
| 2 | 0.5 | BK/GY | 5296 | Camshaft Position Exhaust Sensor Low Reference 1 | I | — |
| 3 | 0.5 | VT/BK | 5273 | Camshaft Position Exhaust Sensor 1 | I | — |

# B23E Camshaft Position Sensor - Exhaust (L3B)



4581126

### Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

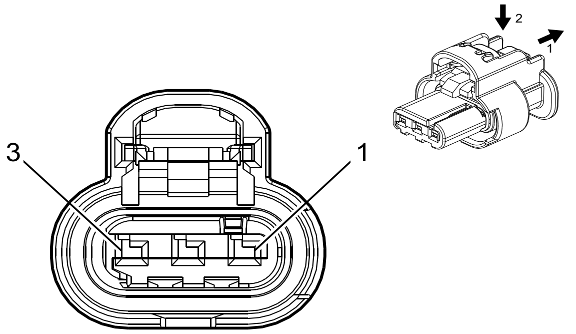
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B23E Camshaft Position Sensor - Exhaust (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/YE | 5297 | Camshaft Position Exhaust Sensor Control 1 | I | — |
| 2 | 0.5 | BK/GY | 5296 | Camshaft Position Exhaust Sensor Low Reference 1 | I | — |
| 3 | 0.5 | VT/BK | 5273 | Camshaft Position Exhaust Sensor 1 | I | — |

# B23F Camshaft Position Sensor - Intake (L3B)



4581126

## Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

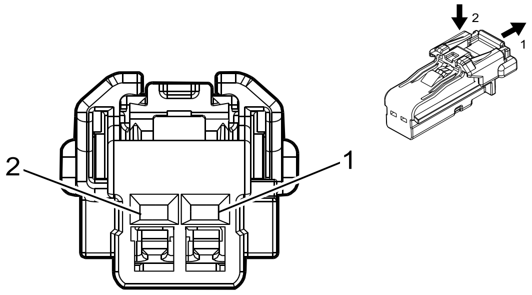
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B23F Camshaft Position Sensor - Intake (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/BU | 5300 | Camshaft Position Intake Sensor Control 1 | I | — |
| 2 | 0.5 | BK/GN | 5301 | Camshaft Position Intake Sensor Low Reference 1 | I | — |
| 3 | 0.5 | YE/VT | 5275 | Camshaft Position Intake Sensor 1 | I | — |

## B24LF Mobile Telephone Microphone - Left Front



4115691

### Connector Part Information

Harness Type: Headliner
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

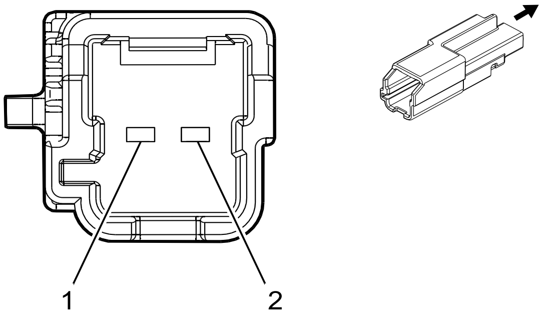
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B24LF Mobile Telephone Microphone - Left Front

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK/BN | 654 | Cellular Telephone Microphone Low Reference | I | — |
| 2 | 0.35 | BU | 655 | Cellular Telephone Microphone Signal | I | — |

# B24RF Mobile Telephone Microphone - Right Front (IOS/IOT)



4116495

## Connector Part Information

Harness Type: Headliner
OEM Connector: 33251047
Service Connector: 19332377
Description: 2-Way M 1.2 Series (GY)

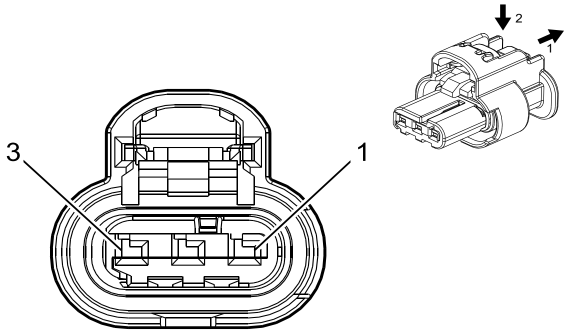
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-13 (BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B24RF Mobile Telephone Microphone - Right Front (IOS/IOT)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35<br>0.35 | BU/BK<br>BU/BK | 7044<br>7044 | Microphone (-) Low Reference<br>Microphone (-) Low Reference | I<br>II | EXTENDED CAB<br>REGULAR CAB |
| 2 | 0.35<br>0.35 | VT/YE<br>VT/YE | 7043<br>7043 | Microphone (+) Signal<br>Microphone (+) Signal | I<br>II | EXTENDED CAB<br>REGULAR CAB |

# B26 Crankshaft Position Sensor (L3B)



4778903

## Connector Part Information

Harness Type: Engine
OEM Connector: 33358808
Service Connector: 19369810
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

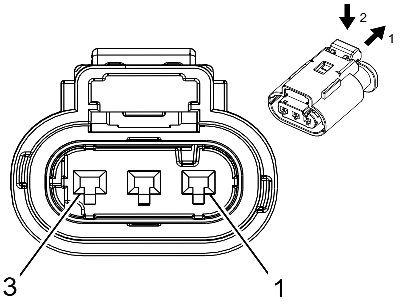
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B26 Crankshaft Position Sensor (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BU | 6270 | Crankshaft 60X Sensor 5V Reference | I | — |
| 2 | 0.5 | BK/VT | 6272 | Crankshaft 60X Sensor Low Reference | I | — |
| 3 | 0.5 | GN | 6271 | Crankshaft 60X Sensor Signal | I | — |

# B26 Crankshaft Position Sensor (L82/L84/L87/LV3)



2717069

## Connector Part Information

Harness Type: Engine
OEM Connector: 13763990
Service Connector: 19299690
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

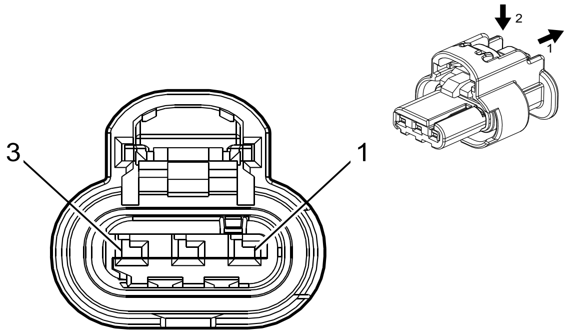
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B26 Crankshaft Position Sensor (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN | 6271 | Crankshaft 60X Sensor Signal | I | — |
| 2 | 0.5 | BK/VT | 6272 | Crankshaft 60X Sensor Low Reference | I | — |
| 3 | 0.5 | VT/BU | 6270 | Crankshaft 60X Sensor 5V Reference | I | — |

# B26 Crankshaft Position Sensor (LM2)



4581126

## Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

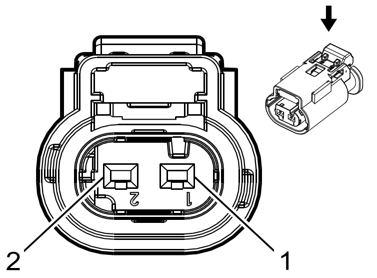
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B26 Crankshaft Position Sensor (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BU | 6270 | Crankshaft 60X Sensor 5V Reference | I | — |
| 2 | 0.5 | BK/VT | 6272 | Crankshaft 60X Sensor Low Reference | I | — |
| 3 | 0.5 | GN | 6271 | Crankshaft 60X Sensor Signal | I | — |

# B34 Engine Coolant Temperature Sensor (L82/L84/L87)



2717066

## Connector Part Information

Harness Type: Active Fuel Management Solenoid Jumper
OEM Connector: 13503566
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

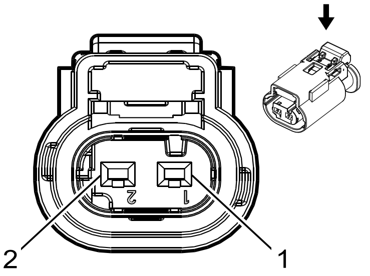
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B34 Engine Coolant Temperature Sensor (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/BN | 2761 | Coolant Temperature Sensor Low Reference | I | — |
| 2 | 0.5 | BU | 410 | Engine Coolant Temperature Sensor Signal | I | — |

# B34 Engine Coolant Temperature Sensor (LV3)



2717066

## Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

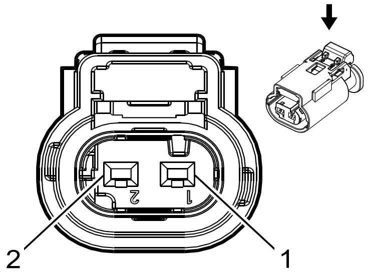
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B34 Engine Coolant Temperature Sensor (LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 2 | 0.5 | BU | 410 | Engine Coolant Temperature Sensor Signal | I | — |

# B34A Engine Coolant Temperature Sensor 1 (L3B)



2717066

## Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

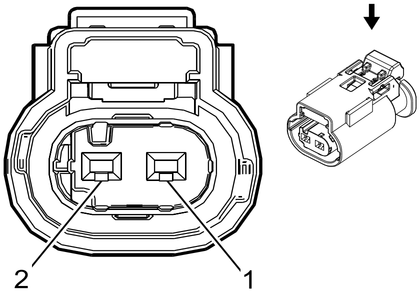
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B34A Engine Coolant Temperature Sensor 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/BU | 2408 | Engine Inlet Coolant Temperature Signal | I | — |
| 2 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |

# B34A Engine Coolant Temperature Sensor 1 (LM2)



2830969

## Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

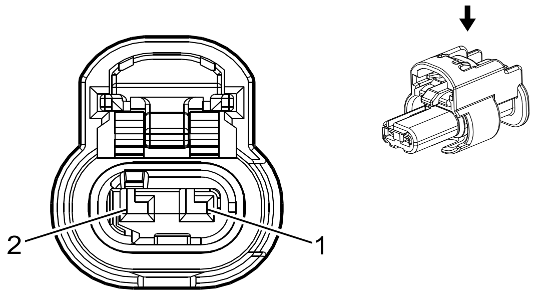
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B34A Engine Coolant Temperature Sensor 1 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/BU | 2408 | Engine Inlet Coolant Temperature Signal | I | — |
| 2 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |

# B34B Engine Coolant Temperature Sensor 2 (L3B)



4690744

## Connector Part Information

Harness Type: Engine
OEM Connector: 33299487
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

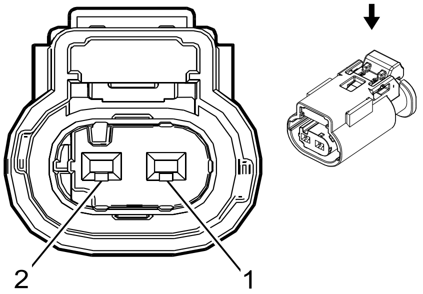
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B34B Engine Coolant Temperature Sensor 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT | 2988 | Engine Outlet Coolant Temperature Signal | I | — |
| 2 | 0.5 | BK/GY | 626 | Engine Control Sensors Low Reference (3) | I | — |

# B34B Engine Coolant Temperature Sensor 2 (LM2)



2830969

## Connector Part Information

Harness Type: Coolant Temperature Jumper
OEM Connector: 10010339
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

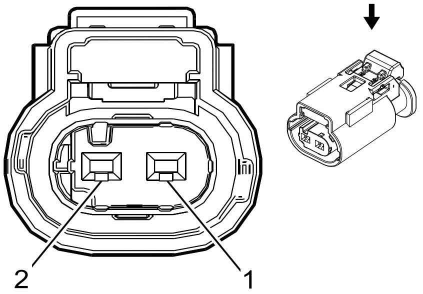
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B34B Engine Coolant Temperature Sensor 2 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT | 2988 | Engine Outlet Coolant Temperature Signal | I | — |
| 2 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |

## B34C Engine Coolant Temperature Sensor 3 (L3B)



2830969

### Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

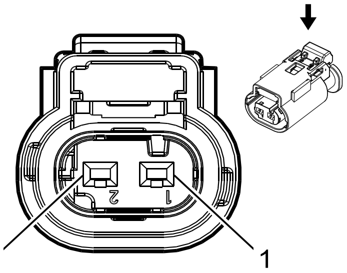
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B34C Engine Coolant Temperature Sensor 3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/GY | 4644 | Heater Core Inlet Temperature Signal | I | — |
| 2 | 0.5 | BK/GY | 626 | Engine Control Sensors Low Reference (3) | I | — |

## B34D Engine Coolant Temperature Sensor 4 (LM2)



2717066

### Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

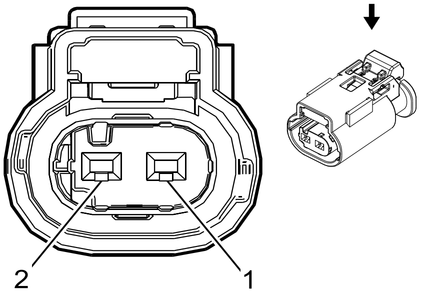
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B34D Engine Coolant Temperature Sensor 4 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 4645 | Heater Core Outlet Temperature Signal | I | — |
| 2 | 0.5<br>0.5 | BK/GY<br>BK/GN | 626<br>580 | Engine Control Sensors Low Reference (3)<br>Engine Control Sensors Low Reference (2) | I<br>I | L3B<br>LM2 |

## B34E Engine Coolant Temperature Sensor 5 (L3B)



2830969

### Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

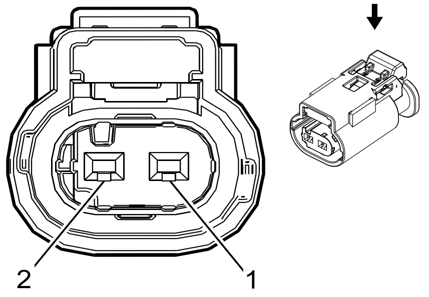
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B34E Engine Coolant Temperature Sensor 5 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 906 | Engine Coolant Temperature Signal | I | — |
| 2 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |

# B34E Engine Coolant Temperature Sensor 5 (LM2)



2830969

## Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

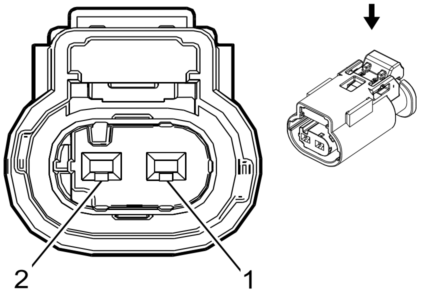
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B34E Engine Coolant Temperature Sensor 5 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/GN | 1417 | Low Pressure Exhaust Gas Recirculation Actuator Signal | I | — |
| 2 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |

## B34F Engine Coolant Temperature Sensor 6 (L3B)



2830969

### Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

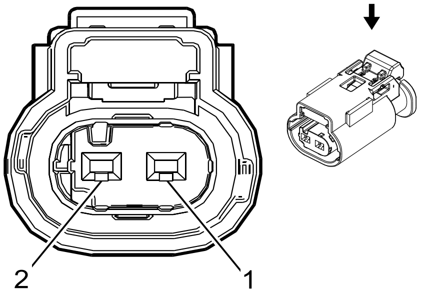
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B34F Engine Coolant Temperature Sensor 6 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/VT | 2404 | Engine Block Coolant Temperature Signal | I | — |
| 2 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |

# B34F Engine Coolant Temperature Sensor 6 (LM2)



2830969

## Connector Part Information

Harness Type: Coolant Temperature Jumper
OEM Connector: 10010339
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

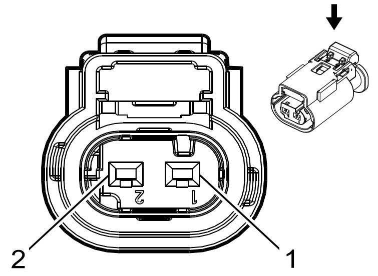
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B34F Engine Coolant Temperature Sensor 6 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 2404 | Engine Block Coolant Temperature Signal | I | — |
| 2 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |

## B35 Engine Oil Level Switch (L82/L84/L87/LV3)



2717066

### Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

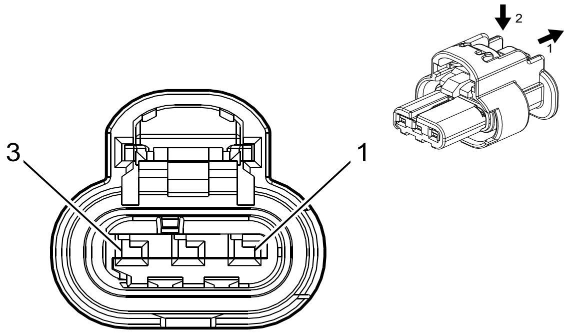
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B35 Engine Oil Level Switch (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/WH | 451 | Signal Ground | I | — |
| 2 | 0.5 | BN/GN | 1174 | Oil Level Switch Signal | I | — |

# B36 Engine Oil Temperature Sensor (L3B/LM2)



4994602

## Connector Part Information

Harness Type: Engine
OEM Connector: 33358809
Service Connector: 19371199
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BN)

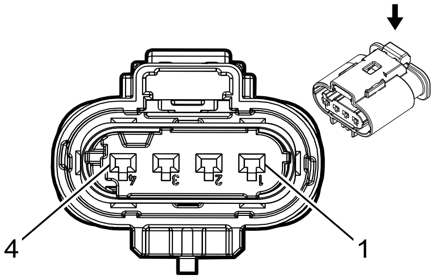
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B36 Engine Oil Temperature Sensor (L3B/LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/GY | 626 | Engine Control Sensors Low Reference (3) | I | — |
| 2 | 0.5 | BN/BU | 357 | Oil Temperature Sensor Signal | I | — |
| 3 | 0.5 | VT | 7485 | Oil Temperature Sensor Signal | I | — |

## B37B Engine Oil Pressure Sensor (L82/L84/L87)



2717079

### Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

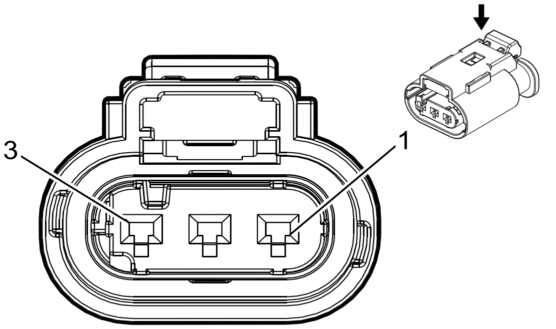
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B37B Engine Oil Pressure Sensor (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 2 | 0.5 | YE/BN | 331 | Oil Pressure Sensor Signal | I | — |
| 3 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 4 | 0.5 | BN/BU | 357 | Oil Temperature Sensor Signal | I | — |

# B37B Engine Oil Pressure Sensor (LM2)



3240107

## Connector Part Information

Harness Type: Engine
OEM Connector: 13889776
Service Connector: 19301717
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

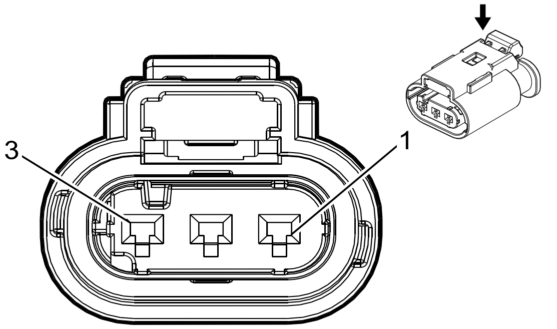
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B37B Engine Oil Pressure Sensor (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/BN | 331 | Oil Pressure Sensor Signal | I | — |
| 2 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 3 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |

## B37B Engine Oil Pressure Sensor (LV3/L3B)



3240107

### Connector Part Information

Harness Type: Engine
OEM Connector: 13889776
Service Connector: 19301717
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

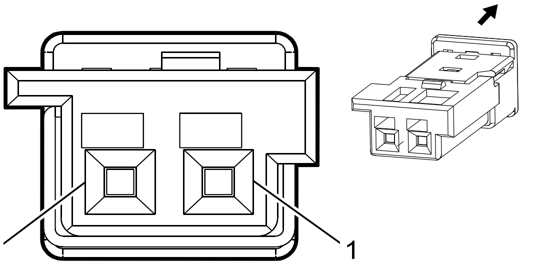
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B37B Engine Oil Pressure Sensor (LV3/L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/BN | 331 | Oil Pressure Sensor Signal | I | — |
| 2 | 0.75<br>0.5 | BK/YE<br>BK/YE | 548<br>548 | Engine Control Sensors Low Reference (1)<br>Engine Control Sensors Low Reference (1) | I<br>I | L3B<br>LV3 |
| 3 | 0.75<br>0.5 | BU/RD<br>WH/RD | 460<br>480 | Engine Control Sensors 5 Volt Reference (1)<br>Engine Control Sensors 5 Volt Reference (2) | I<br>I | L3B<br>LV3 |

# B39 A/C Evaporator Temperature Sensor



2335285

## Connector Part Information

Harness Type: HVAC
OEM Connector: 13235945
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Micro-Quadlock Series (BK)

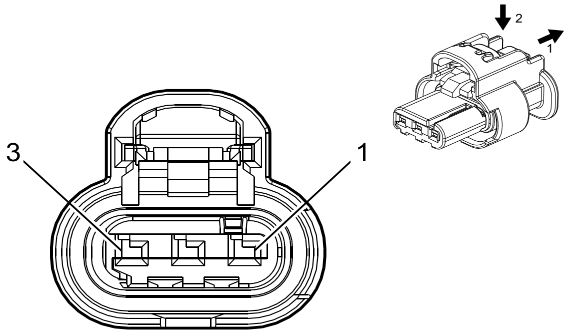
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B39 A/C Evaporator Temperature Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BN | 6137 | EVAP Core Temperature Sensor Signal | I | — |
| 2 | — | BK/YE | 1791 | Air Temperature Door Control Low Reference | I | — |

# B47 Fuel Pressure Sensor (LM2)



4581126

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

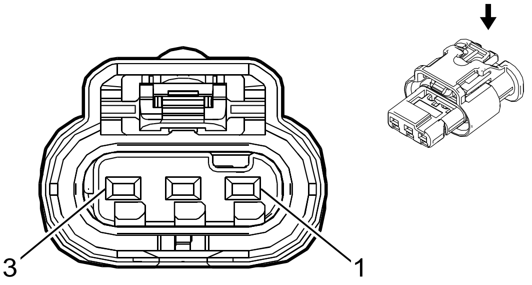
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B47 Fuel Pressure Sensor (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/RD | 7445 | Fuel Line Pressure Sensor 5V Reference | I | — |
| 2 | 0.5 | BK/YE | 7447 | Fuel Line Pressure Sensor Low Reference | I | — |
| 3 | 0.5 | BU/WH | 7446 | Fuel Line Pressure Sensor Signal | I | — |

# B47 Fuel Pressure Sensor (-LM2)



2889711

## Connector Part Information

Harness Type: Chassis
OEM Connector: 13884759
Service Connector: 19330668
Description: 3-Way F 1.2 MCP Series, Sealed (BK)

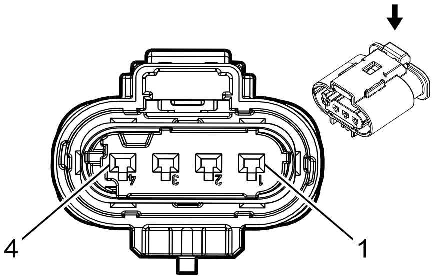
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B47 Fuel Pressure Sensor (-LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/RD | 7445 | Fuel Line Pressure Sensor 5V Reference | I | — |
| 2 | 0.5 | BK/YE | 7447 | Fuel Line Pressure Sensor Low Reference | I | — |
| 3 | 0.5 | BU/WH | 7446 | Fuel Line Pressure Sensor Signal | I | — |

## B47B Fuel Rail Pressure Sensor (LM2)



2717079

### Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

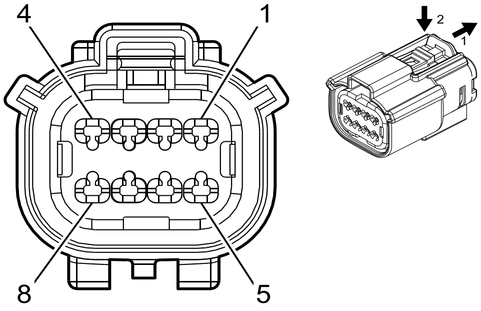
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B47B Fuel Rail Pressure Sensor (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/RD | 2917 | Fuel Rail Pressure Sensor 5V Reference | I | — |
| 2 | 0.5 | BN/YE | 2161 | Fuel Rail Pressure Sensor 2 Signal | I | — |
| 3 | 0.5 | BK/GN | 2919 | Fuel Rail Pressure Sensor Low Reference | I | — |
| 4 | 0.5 | BU/WH | 2918 | Fuel Rail Pressure Sensor Signal | I | — |

# B52A Heated Oxygen Sensor 1 (L3B)



4846403

## Connector Part Information

Harness Type: Engine
OEM Connector: 35037828
Service Connector: 19369368
Description: 8-Way F 150 MX Series, Sealed (BK)

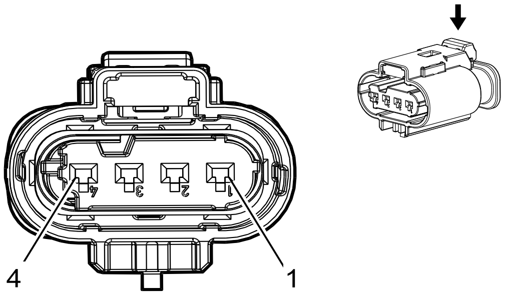
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B52A Heated Oxygen Sensor 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN | 6934 | Heated Oxygen Sensor Ground | I | — |
| 2 | 0.75 | YE/GY | 6936 | Heated Oxygen Sensor Collector Signal | I | — |
| 3 | 0.75 | BN/WH | 6933 | Heated Oxygen Sensor Current Pump Signal | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 6 | 0.75 | GY/WH | 3113 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1 | I | — |
| 7 | 0.75 | GN | 6935 | Heated Oxygen Sensor Current Adjust Signal | I | — |
| 8 | — | — | — | Not Occupied | — | — |

# B52B Heated Oxygen Sensor 2 (L3B)



## Connector Part Information

Harness Type: Engine
OEM Connector: 15532689
Service Connector: 19330904
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

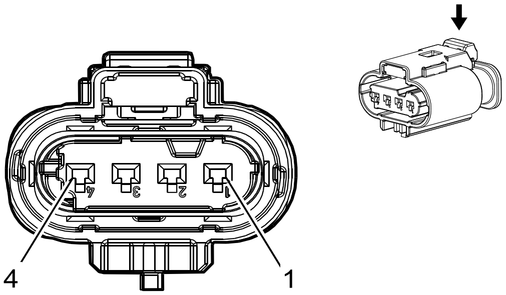
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B52B Heated Oxygen Sensor 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GY/WH | 3122 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2 | I | — |
| 2 | 0.5 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | I | — |
| 3 | 0.75 | WH/YE | 3121 | Heated Oxygen Sensor Low Signal Bank 1 Sensor 2 | I | — |
| 4 | 0.75 | VT/BU | 3120 | Heated Oxygen Sensor High Signal Bank 1 Sensor 2 | I | — |

# B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/L87)



## Connector Part Information

Harness Type: Engine
OEM Connector: 33253021
Service Connector: 19354075
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

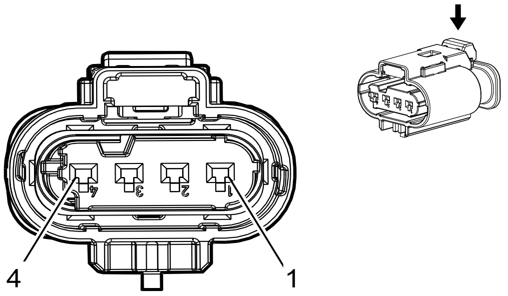
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/WH | 3113 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1 | I | — |
| 2 | 0.75 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 3 | 0.5 | WH/BK | 3111 | Heated Oxygen Sensor Low Signal Bank 1 Sensor 1 | I | — |
| 4 | 0.5 | VT/GY | 3110 | Heated Oxygen Sensor High Signal Bank 1 Sensor 1 | I | — |

# B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LV3)



4036496

## Connector Part Information

Harness Type: Engine
OEM Connector: 15532689
Service Connector: 19330904
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

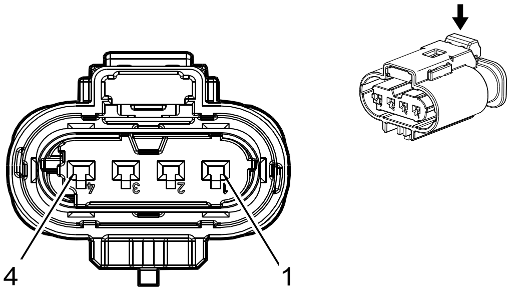
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B52C Heated Oxygen Sensor - Bank 1 Sensor 1 (LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/WH | 3113 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1 | I | — |
| 2 | 0.75 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 3 | 0.5 | WH/BK | 3111 | Heated Oxygen Sensor Low Signal Bank 1 Sensor 1 | I | — |
| 4 | 0.5 | VT/GY | 3110 | Heated Oxygen Sensor High Signal Bank 1 Sensor 1 | I | — |

## B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/L87)



4036370

### Connector Part Information

Harness Type: Engine
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed (GY)

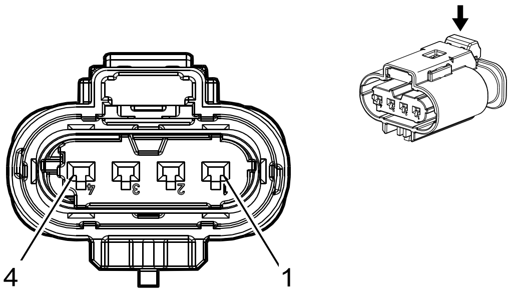
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/WH | 3122 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2 | I | — |
| 2 | 0.75 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | I | — |
| 3 | 0.5 | WH/YE | 3121 | Heated Oxygen Sensor Low Signal Bank 1 Sensor 2 | I | — |
| 4 | 0.5 | VT/BU | 3120 | Heated Oxygen Sensor High Signal Bank 1 Sensor 2 | I | — |

# B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LV3)



4036370

## Connector Part Information

Harness Type: Engine
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed (GY)

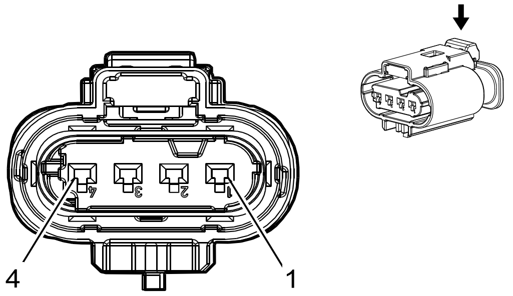
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B52D Heated Oxygen Sensor - Bank 1 Sensor 2 (LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/WH | 3122 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2 | I | — |
| 2 | 0.75 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | I | — |
| 3 | 0.5 | WH/YE | 3121 | Heated Oxygen Sensor Low Signal Bank 1 Sensor 2 | I | — |
| 4 | 0.5 | VT/BU | 3120 | Heated Oxygen Sensor High Signal Bank 1 Sensor 2 | I | — |

# B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/L87)



4381050

## Connector Part Information

Harness Type: Engine
OEM Connector: 33253021
Service Connector: 19354075
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

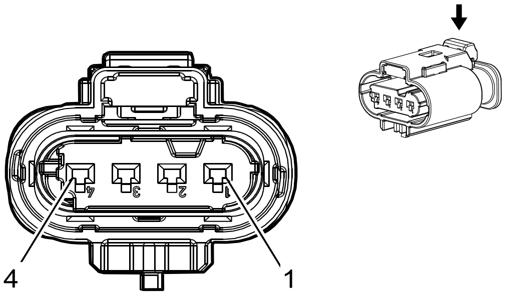
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/YE | 3212 | Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1 | I | — |
| 2 | 0.75 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 3 | 0.5 | YE/WH | 3211 | Heated Oxygen Sensor Low Signal Bank 2 Sensor 1 | I | — |
| 4 | 0.5 | VT/WH | 3210 | Heated Oxygen Sensor High Signal Bank 2 Sensor 1 | I | — |

# B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LV3)



4381050

## Connector Part Information

Harness Type: Engine
OEM Connector: 33253021
Service Connector: 19354075
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

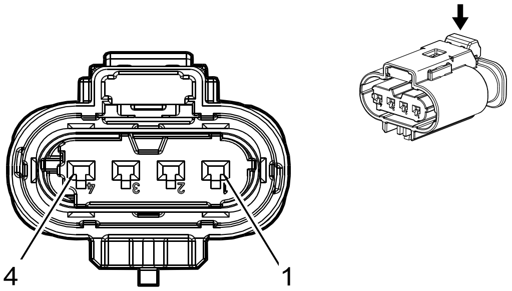
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B52E Heated Oxygen Sensor - Bank 2 Sensor 1 (LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/YE | 3212 | Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1 | I | — |
| 2 | 0.75 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 3 | 0.5 | YE/WH | 3211 | Heated Oxygen Sensor Low Signal Bank 2 Sensor 1 | I | — |
| 4 | 0.5 | VT/WH | 3210 | Heated Oxygen Sensor High Signal Bank 2 Sensor 1 | I | — |

# B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87)



4036370

## Connector Part Information

Harness Type: Engine
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed (GY)

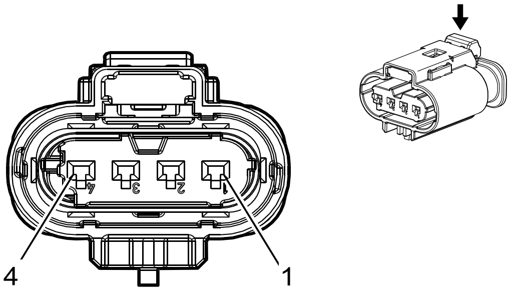
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/BN | 3223 | Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2 | I | — |
| 2 | 0.75 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | I | — |
| 3 | 0.5 | YE/BU | 3221 | Heated Oxygen Sensor Low Signal Bank 2 Sensor 2 | I | — |
| 4 | 0.5 | VT/GN | 3220 | Heated Oxygen Sensor High Signal Bank 2 Sensor 2 | I | — |

# B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LV3)



4036370

## Connector Part Information

Harness Type: Engine
OEM Connector: 15532690
Service Connector: 19330920
Description: 4-Way F 1.2 Multilock Series, Sealed (GY)

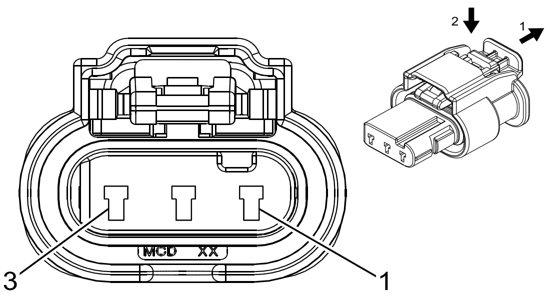
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B52F Heated Oxygen Sensor - Bank 2 Sensor 2 (LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/BN | 3223 | Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2 | I | — |
| 2 | 0.75 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | I | — |
| 3 | 0.5 | YE/BU | 3221 | Heated Oxygen Sensor Low Signal Bank 2 Sensor 2 | I | — |
| 4 | 0.5 | VT/GN | 3220 | Heated Oxygen Sensor High Signal Bank 2 Sensor 2 | I | — |

# B55 Engine Hood Switch



4421568

## Connector Part Information

Harness Type: Body
OEM Connector: 33320864
Service Connector: 19368220
Description: 3-Way F 1.2 MCON-LL Series, Sealed (BK)

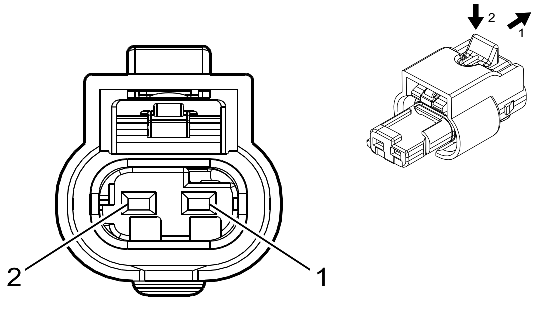
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B55 Engine Hood Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE | 4063 | Hood Status A Signal | I | — |
| 2 | 0.35 | BN/GN | 4064 | Hood Status B Signal | I | — |
| 3 | 0.75 | BK | 150 | Ground | I | — |

# B59L Front Impact Sensor - Left



4975834

## Connector Part Information

Harness Type: Body
OEM Connector: 33299485
Service Connector: 19371203
Description: 2-Way F 1.2 MCON-CB Series, Sealed (BK)

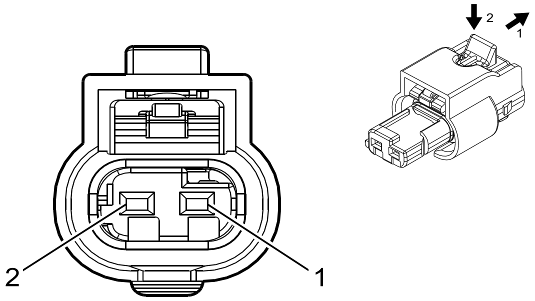
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B59L Front Impact Sensor - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/YE | 354 | Left Front Discriminating Sensor Signal | I | — |
| 2 | 0.5 | BK/OG | 5045 | Left Front Discriminating Sensor Low Reference | I | — |

## B59R Front Impact Sensor - Right



### Connector Part Information

Harness Type: Body
OEM Connector: 33299485
Service Connector: 19371203
Description: 2-Way F 1.2 MCON-CB Series, Sealed (BK)

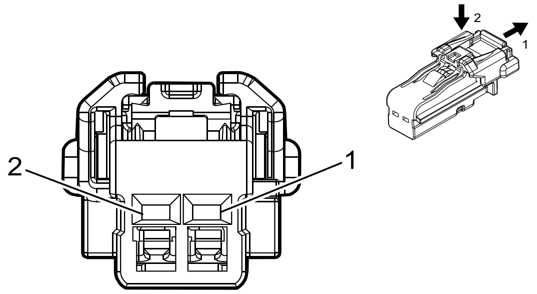
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B59R Front Impact Sensor - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/GN | 1409 | Right Front Discriminating Sensor Signal | I | — |
| 2 | 0.5 | BK/OG | 5600 | Right Front Discriminating Sensor Low Reference | I | — |

# B61P Seat Belt Tension Sensor - Passenger (AL0)



4115691

## Connector Part Information

Harness Type: Body
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

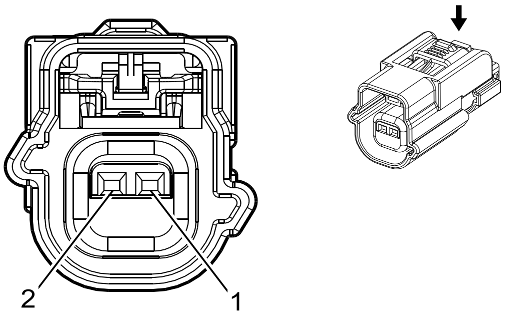
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B61P Seat Belt Tension Sensor - Passenger (AL0)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/OG | 3946 | Automatic Locking Retractor Switch Low Reference | I | — |
| 2 | 0.5 | OG/BN | 3947 | Automatic Locking Retractor Switch Signal | I | — |

# B63LF Side Impact Sensor - Left Front



## Connector Part Information

Harness Type: Driver Door
OEM Connector: 33503704
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed

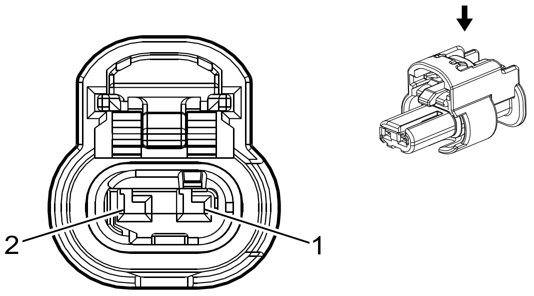
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B63LF Side Impact Sensor - Left Front

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | OG/GN | 2132 | Left Front Side Impact Sensing Module Signal | I | — |
| 2 | 0.75 | BK/OG | 6628 | Left Front Side Impact Sensing Module Low Reference | I | — |

## B63LR Side Impact Sensor - Left Rear



4649903

### Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

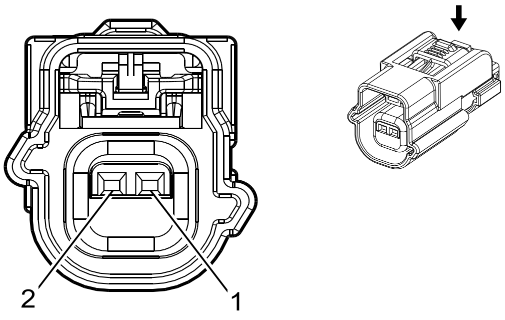
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B63LR Side Impact Sensor - Left Rear

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/BU | 6622 | Left Rear Side Impact Sensing Module Signal | I | — |
| 2 | 0.5 | BK/OG | 6623 | Left Rear Side Impact Sensing Module Low Reference | I | — |

# B63RF Side Impact Sensor - Right Front



3931604

## Connector Part Information

Harness Type: Passenger Door
OEM Connector: 33503704
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Series, Sealed

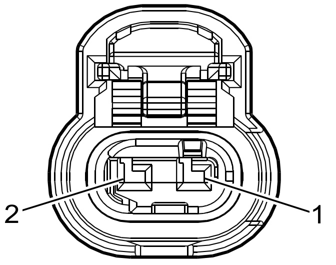
## Terminal Part Information

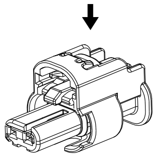
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B63RF Side Impact Sensor - Right Front

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN/OG | 2134 | Right Front Side Impact Sensing Module Signal | I | — |
| 2 | 0.75 | BK/OG | 6629 | Right Front Side Impact Sensing Module Low Reference | I | — |

## B63RR Side Impact Sensor - Right Rear





### Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

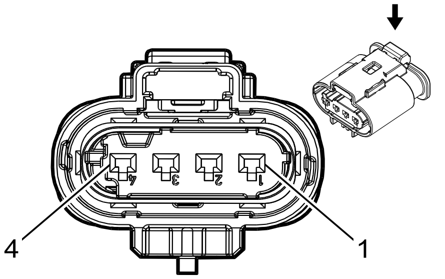
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B63RR Side Impact Sensor - Right Rear

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/VT | 6626 | Right Rear Side Impact Sensing Module Signal | I | — |
| 2 | 0.5 | BK/OG | 6627 | Right Rear Side Impact Sensing Module Low Reference | I | — |

# B65 Intake Manifold Pressure and Air Temperature Sensor (L3B)



2717079

## Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

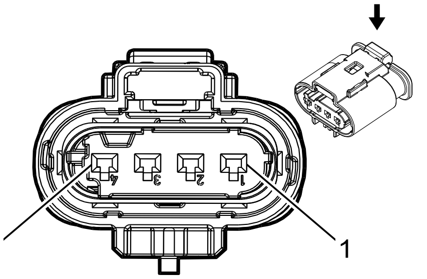
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B65 Intake Manifold Pressure and Air Temperature Sensor (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 7348 | Induction Air Temperature Sensor 2 Signal | I | — |
| 2 | 0.5 | GY/RD | 2704 | Manifold Absolute Pressure Sensor 5V Reference | I | — |
| 3 | 0.5 | BK/GN | 469 | Manifold Absolute Pressure Sensor Low Reference | I | — |
| 4 | 0.5 | GN/WH | 432 | Manifold Absolute Pressure Sensor Signal | I | — |

# B65 Intake Manifold Pressure and Air Temperature Sensor (LM2)



2717079

## Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

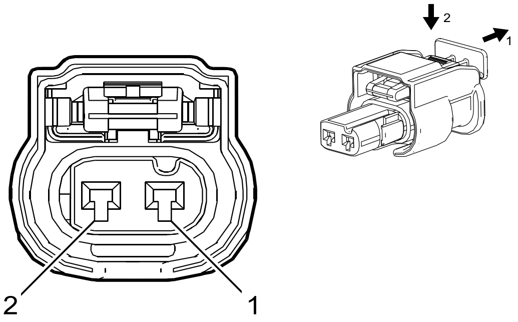
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B65 Intake Manifold Pressure and Air Temperature Sensor (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/BU | 6118 | Manifold Air Temperature Sensor Signal | I | — |
| 2 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 3 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |
| 4 | 0.5 | GN/WH | 432 | Manifold Absolute Pressure Sensor Signal | I | — |

# B68A Knock Sensor 1 (L3B)



3960139

### Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34900-2120
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

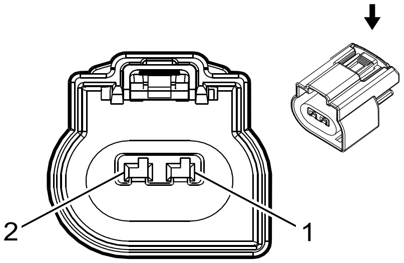
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B68A Knock Sensor 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/GY | 496 | Knock Sensor Signal 1 | I | — |
| 2 | 0.5 | BK/YE | 1716 | Knock Sensor Low Reference 1 | I | — |

# B68A Knock Sensor 1 (-LM2)



2717073

## Connector Part Information

Harness Type: Engine
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 150 MX Series, Sealed (BK)

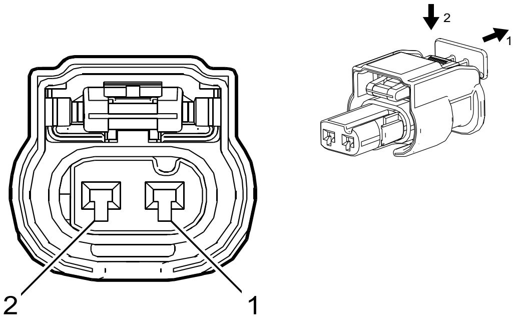
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B68A Knock Sensor 1 (-LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK/YE | 1716 | Knock Sensor Low Reference 1 | I | L82/L84/L87 |
|  | 0.75 | VT/GY | 496 | Knock Sensor Signal 1 | I | LV3/L3B |
| 2 | 0.75 | VT/GY | 496 | Knock Sensor Signal 1 | I | L82/L84/L87 |
|  | 0.75 | BK/YE | 1716 | Knock Sensor Low Reference 1 | I | LV3/L3B |

# B68B Knock Sensor 2 (L3B)



3960139

## Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34900-2120
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

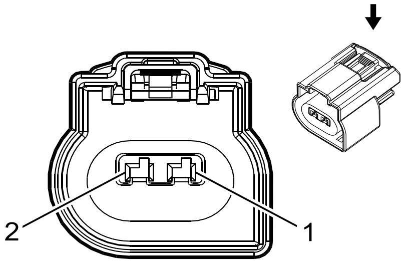
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B68B Knock Sensor 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/GY | 1876 | Knock Sensor Signal 2 | I | — |
| 2 | 0.5 | BK/GY | 2303 | Knock Sensor Low Reference 2 | I | — |

## B68B Knock Sensor 2 (-LM2)



2717073

### Connector Part Information

Harness Type: Engine
OEM Connector: 13814755
Service Connector: 19301207
Description: 2-Way F 150 MX Series, Sealed (BK)

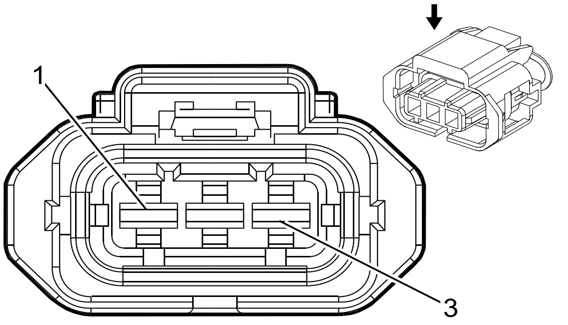
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B68B Knock Sensor 2 (-LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | WH/GY | 1876 | Knock Sensor Signal 2 | I | L3B/LV3 |
| | 0.75 | BK/GY | 2303 | Knock Sensor Low Reference 2 | I | L82/L84/L87 |
| 2 | 0.75 | BK/GY | 2303 | Knock Sensor Low Reference 2 | I | L3B/LV3 |
| | 0.75 | WH/GY | 1876 | Knock Sensor Signal 2 | I | L82/L84/L87 |

# B74 Manifold Absolute Pressure Sensor (L82/L84/L87)



1914850

## Connector Part Information

Harness Type: Engine
OEM Connector: 15397338
Service Connector: 13585845
Description: 3-Way F 2.8 Junior Power Timer Series, Sealed (BK)

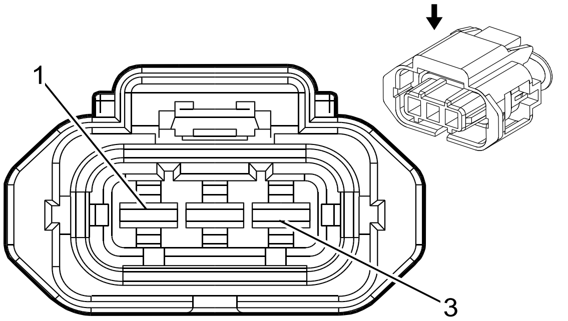
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B74 Manifold Absolute Pressure Sensor (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/RD | 2704 | Manifold Absolute Pressure Sensor 5V Reference | I | — |
| 2 | 0.5 | BK/GN | 469 | Manifold Absolute Pressure Sensor Low Reference | I | — |
| 3 | 0.5 | GN/WH | 432 | Manifold Absolute Pressure Sensor Signal | I | — |

# B74 Manifold Absolute Pressure Sensor (LV3)



1914850

## Connector Part Information

Harness Type: Engine
OEM Connector: 15397338
Service Connector: 13585845
Description: 3-Way F 2.8 Junior Power Timer Series, Sealed (BK)

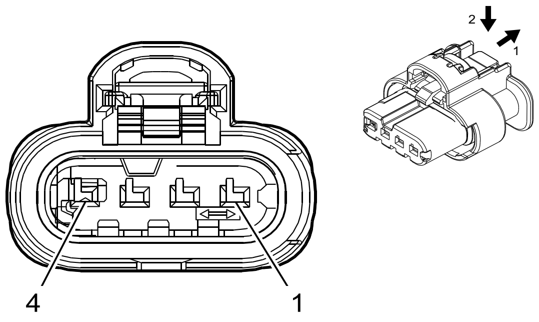
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B74 Manifold Absolute Pressure Sensor (LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/RD | 2704 | Manifold Absolute Pressure Sensor 5V Reference | I | — |
| 2 | 0.5 | BK/GN | 469 | Manifold Absolute Pressure Sensor Low Reference | I | — |
| 3 | 0.5 | GN/WH | 432 | Manifold Absolute Pressure Sensor Signal | I | — |

# B75C Multifunction Intake Air Sensor



4934614

## Connector Part Information

Harness Type: Engine
OEM Connector: 33367416
Service Connector: 19371196
Description: 4-Way F 1.2 MCON-CB Series, Sealed (BK)

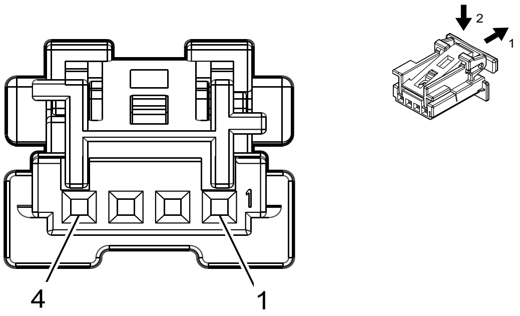
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B75C Multifunction Intake Air Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | I | — |
| 2 | 0.5 | GN/WH | 492 | Mass Air Flow Sensor Signal | I | — |
| 3 | 0.5 | GN/WH | 4622 | Local Interconnect Network Serial Data Bus 22 | I | — |
| 4 | 0.5<br>0.75 | BK/WH<br>BK/WH | 451<br>451 | Signal Ground<br>Signal Ground | I<br>I | L3B/LM2/L82/L84/L87<br>LV3 |

# B80 Park Brake Switch



4997407

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35082250
Service Connector: 19371192
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

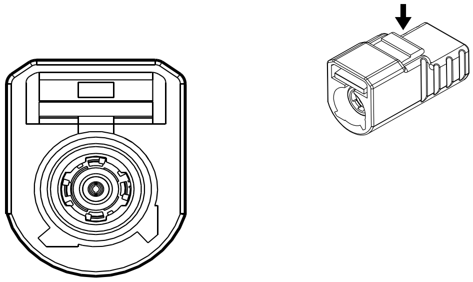
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B80 Park Brake Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD/GN | 5140 | Battery Positive Voltage | I | — |
| 2 | 0.35 | GN/YE | 2731 | Local Interconnect Network Bus 31 | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.35 | BK | 1850 | Ground | I | — |

## B87 Rearview Camera (UVB)



4883511

### Connector Part Information

Harness Type: Endgate COAX
OEM Connector: 13514003
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (OG)

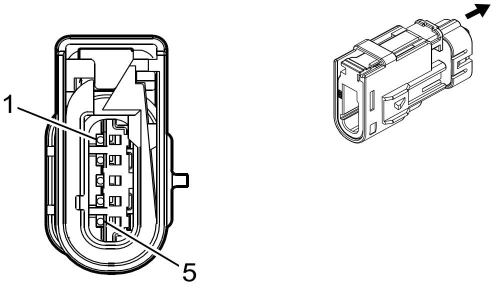
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B87 Rearview Camera (UVB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | Coaxial Camera Signal | I | — |

# B87 Rearview Camera (UVC)



4808321

## Connector Part Information

Harness Type: Endgate
OEM Connector: 35028910
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way M 1.2 Series, Sealed (GY)

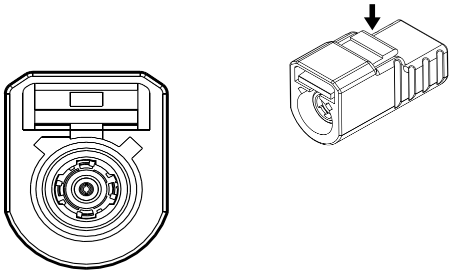
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B87 Rearview Camera (UVC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/YE | 6972 | Camera Signal 2 + | I | — |
| 2 | 0.5 | WH/BU | 6973 | Camera Signal 2 | I | — |
| 3 | 0.35 | BU | 6974 | Camera Low Reference | I | — |
| 4 | 0.5 | BK/WH | 1751 | Signal Ground | I | — |
| 5 | 0.5 | VT/GN | 1739 | Run/Crank Ignition 1 Voltage | I | — |

# B87 Rearview Camera (UVI/UV2)



4883521

## Connector Part Information

Harness Type: Endgate COAX
OEM Connector: 13514007
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BK)

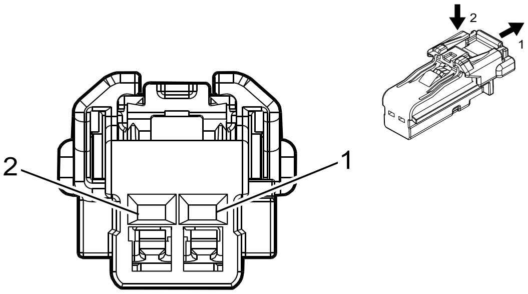
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B87 Rearview Camera (UVI/UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | Camera Signal | I | — |

## B88D Seat Belt Switch - Driver (A2S)



4115691

### Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-7685
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

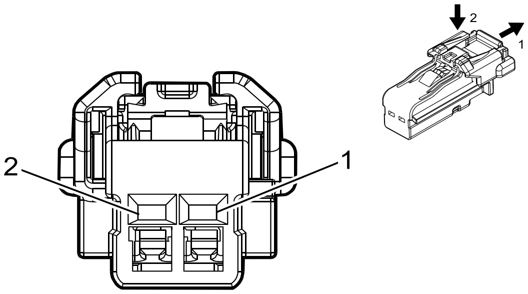
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B88D Seat Belt Switch - Driver (A2S)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/OG | 1363 | Driver Seat Belt Switch Low Reference | I | — |
| 2 | 0.35 | OG/BN | 238 | Driver Seat Belt Switch Signal | I | — |

# B88D Seat Belt Switch - Driver (A2X)



4115691

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-8431
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

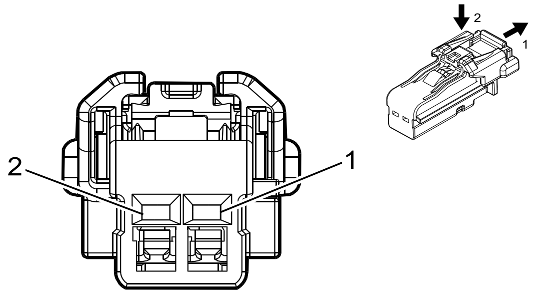
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B88D Seat Belt Switch - Driver (A2X)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/OG | 1363 | Driver Seat Belt Switch Low Reference | I | — |
| 2 | 0.35 | OG/BN | 238 | Driver Seat Belt Switch Signal | I | — |

## B88P Seat Belt Switch - Passenger (A7E)



4115691

### Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-7685
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

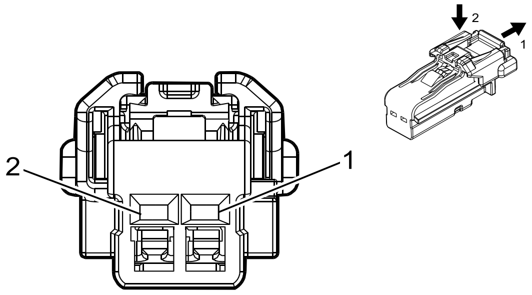
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B88P Seat Belt Switch - Passenger (A7E)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/OG | 1361 | Passenger Seat Belt Switch Low Reference | I | — |
| 2 | 0.35 | OG/VT | 1362 | Passenger Seat Belt Switch Signal | I | — |

# B88P Seat Belt Switch - Passenger (A7K)



4115691

## Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-8431
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

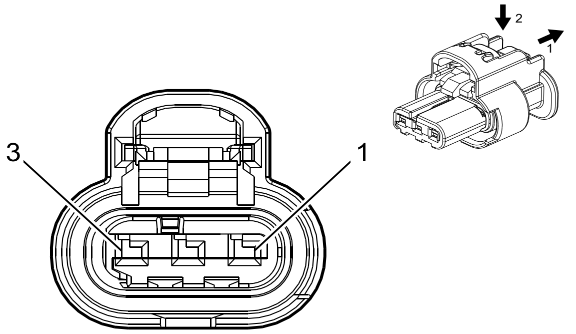
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B88P Seat Belt Switch - Passenger (A7K)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/OG | 1361 | Passenger Seat Belt Switch Low Reference | I | — |
| 2 | 0.35 | OG/VT | 1362 | Passenger Seat Belt Switch Signal | I | — |

# B96 Cylinder Head Temperature Sensor (LM2)



## Connector Part Information

Harness Type: Engine
OEM Connector: 33358809
Service Connector: 19371199
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BN)

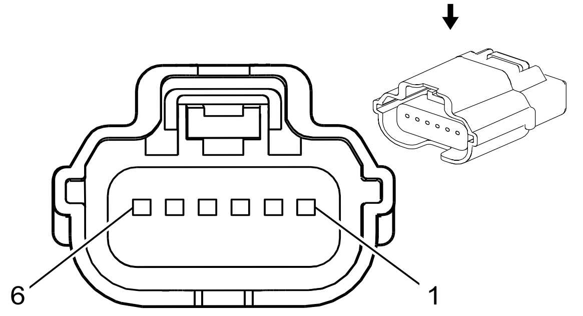
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B96 Cylinder Head Temperature Sensor (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/GY | 626 | Engine Control Sensors Low Reference (3) | I | — |
| 2 | 0.5 | GN/YE | 37 | Engine Metal Temperature Sensor Signal | I | — |
| 3 | 0.5 | BN/YE | 1372 | Engine Metal Temperature Sensor Signal (2) | I | — |

# B107 Accelerator Pedal Position Sensor



1974974

## Connector Part Information

Harness Type: Body
OEM Connector: 13835162
Service Connector: 19356496
Description: 6-Way F 0.64 Series, Sealed (BK)

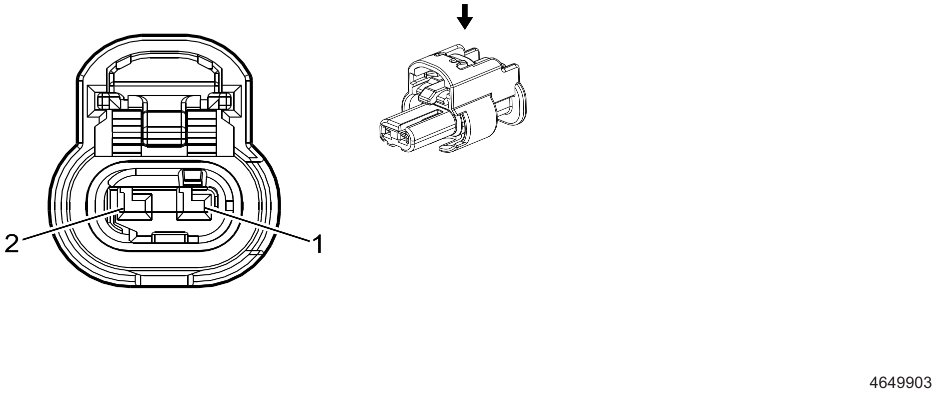
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B107 Accelerator Pedal Position Sensor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH/RD | 1164 | Accelerator Pedal Position 5V Reference 1 | I | — |
| 2 | 0.35 | YE/WH | 1161 | Accelerator Pedal Position Signal 1 | I | — |
| 3 | 0.35 | BK/BU | 1271 | Accelerator Pedal Position Low Reference 1 | I | — |
| 4 | 0.35 | BK/VT | 1272 | Accelerator Pedal Position Low Reference 2 | I | — |
| 5 | 0.35 | GN/WH | 1162 | Accelerator Pedal Position Signal 2 | I | — |
| 6 | 0.35 | BN/RD | 1274 | Accelerator Pedal Position 5V Reference 2 | I | — |

# B110 Battery Sensor Module X1 (Crew Cab/Extended Cab)



## Connector Part Information

Harness Type: Body
OEM Connector: 33327048
Service Connector: 19366858
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B110 Battery Sensor Module X1 (Crew Cab/Extended Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/VT | 4621 | Local Interconnect Network Serial Data Bus 21 | I | — |
| 2 | 0.75 | RD/YE | 2340 | Battery Positive Voltage | I | — |

# B110 Battery Sensor Module X2 (KL9)

—

## Connector Part Information

Harness Type: Battery
OEM Connector: 13516387
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

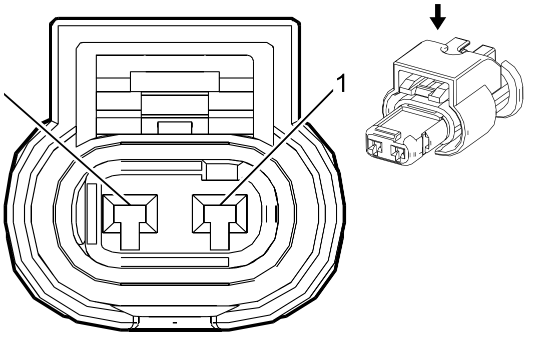
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B110 Battery Sensor Module X2 (KL9)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | — | BK | 2350 | Ground | I | — |

## B110 Battery Sensor Module X1 (Regular Cab)



2474752

### Connector Part Information

Harness Type: Body
OEM Connector: 13761652
Service Connector: 13577519
Description: 2-Way F 1.2 MCP Series, Sealed (BK)

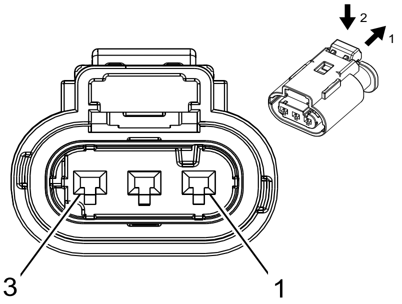
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B110 Battery Sensor Module X1 (Regular Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/VT | 4621 | Local Interconnect Network Serial Data Bus 21 | I | — |
| 2 | 0.75 | RD/YE | 2340 | Battery Positive Voltage | I | — |

# B111 Turbocharger Boost Sensor (L3B)



2717069

## Connector Part Information

Harness Type: Engine
OEM Connector: 13763990
Service Connector: 19299690
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

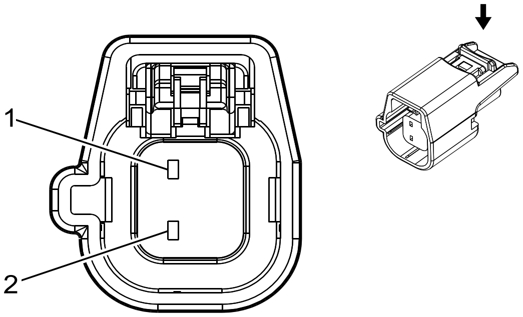
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B111 Turbocharger Boost Sensor (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 2 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 3 | 0.5 | YE | 2596 | Turbo Charger Inlet Absolute Pressure Sensor Signal | I | — |

# B118B Windshield Washer Fluid Level Switch



3958652

## Connector Part Information

Harness Type: Body
OEM Connector: 33113086
Service Connector: 13593220
Description: 2-Way F 1.5 Series (L-GY)

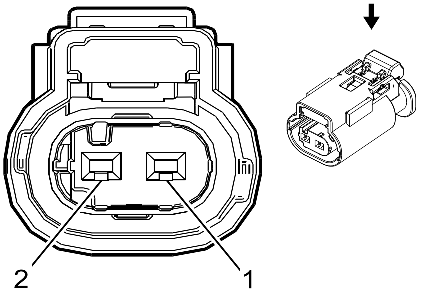
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B118B Windshield Washer Fluid Level Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | VT | 185 | Low Washer Fluid Indicator Control | I | — |
| 2 | 0.75 | BK | 150 | Ground | I | — |

# B130A Exhaust Gas Recirculation Temperature Sensor 1 (LM2)



### Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

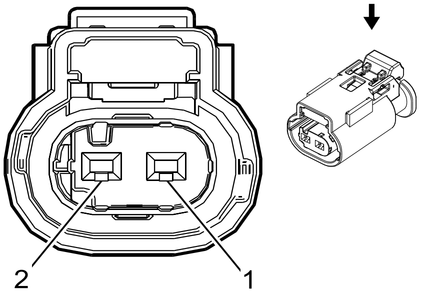
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B130A Exhaust Gas Recirculation Temperature Sensor 1 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/WH | 5277 | Exhaust Gas Temperature Sensor 1 | I | — |
| 2 | 0.5 | BK/BN | 6782 | Exhaust Gas Temperature Sensor 1 Low Reference | I | — |

# B130AH Exhaust Gas Recirculation Temperature Sensor 1 - High Pressure (LM2)



2830969

## Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

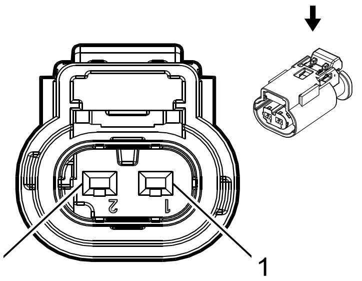
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B130AH Exhaust Gas Recirculation Temperature Sensor 1 - High Pressure (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/GN | 3236 | Exhaust Gas Recirculation Temperature Sensor 2 Signal | I | — |
| 2 | 0.5 | BK/YE | 6275 | Exhaust Gas Recirculation Temperature Sensor 2 Low Reference | I | — |

# B130B Exhaust Gas Recirculation Temperature Sensor 2 (LM2)



2717037

## Connector Part Information

Harness Type: Engine
OEM Connector: 13735325
Service Connector: 13587325
Description: 2-Way F 1.2 Multilock Series, Sealed (L-GY)

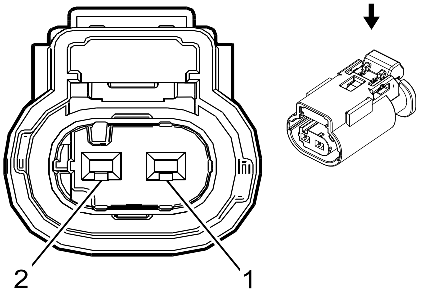
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B130B Exhaust Gas Recirculation Temperature Sensor 2 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/GN | 5377 | Exhaust Gas Temperature Sensor 2 | I | — |
| 2 | 0.5 | BK/BU | 6783 | Exhaust Gas Temperature Sensor 2 Low Reference | I | — |

# B130BH Exhaust Gas Recirculation Temperature Sensor 2 - High Pressure (LM2)



2830969

## Connector Part Information

Harness Type: Engine
OEM Connector: 13840071
Service Connector: 13587321
Description: 2-Way F 1.2 Multilock Series, Sealed (D-GY)

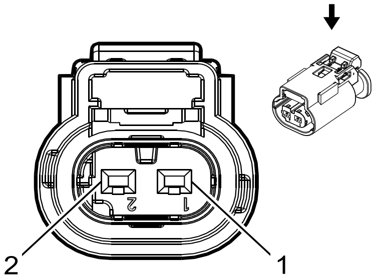
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B130BH Exhaust Gas Recirculation Temperature Sensor 2 - High Pressure (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/GY | 3234 | Exhaust Gas Recirculation Temperature Sensor 3 Signal | I | — |
| 2 | 0.5 | BK/GN | 3235 | Exhaust Gas Recirculation Temperature Sensor 3 Low Reference | I | — |

# B130C Exhaust Gas Recirculation Temperature Sensor 3 (LM2)



2717037

## Connector Part Information

Harness Type: Engine
OEM Connector: 13735325
Service Connector: 13587325
Description: 2-Way F 1.2 Multilock Series, Sealed (L-GY)

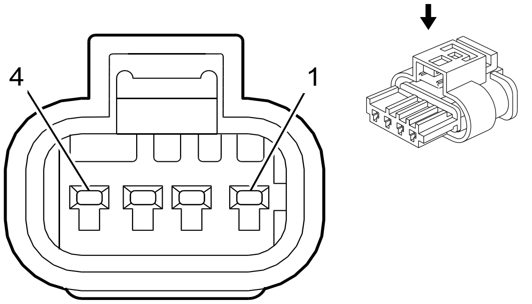
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B130C Exhaust Gas Recirculation Temperature Sensor 3 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/GN | 5378 | Exhaust Gas Temperature Sensor 3 | I | — |
| 2 | 0.5 | BK/GN | 3657 | Exhaust Gas Temperature Sensor 3 Low Reference | I | — |

# B136 Exhaust Particulate Matter Sensor (LM2)



2487928

## Connector Part Information

Harness Type: Chassis
OEM Connector: 13781047
Service Connector: 13581092
Description: 4-Way F 1.2 Series, Sealed (BK)

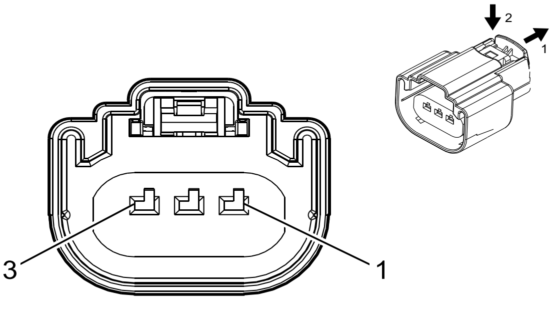
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B136 Exhaust Particulate Matter Sensor (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK/WH | 1651 | Signal Ground | I | — |
| 2 | 0.5 | WH | 4499 | High Speed GMLAN Serial Data (-) 7 | I | — |
| 3 | 0.5 | BU/BN | 4498 | High Speed GMLAN Serial Data (+) 7 | I | — |
| 4 | 0.75 | VT/BU | 3674 | NOx Sensor 1 Control | I | — |

# B139 Transfer Case 2WD/4WD Actuator Position Sensor (NP0/NQH)



4569745

## Connector Part Information

Harness Type: Engine
OEM Connector: 33343869
Service Connector: 19179750
Description: 3-Way F 150 MX Series, Sealed (BK)

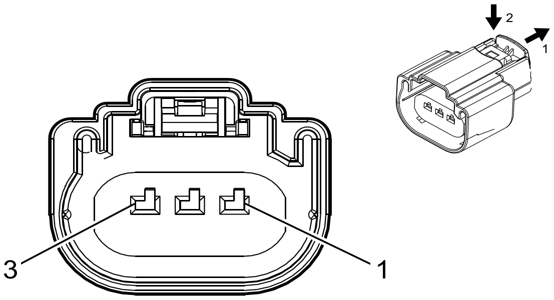
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B139 Transfer Case 2WD/4WD Actuator Position Sensor (NP0/NQH)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/RD | 7477 | Rotary Position Sensor 5V Reference | I | — |
| 2 | 0.5 | WH/GN | 7479 | Rotary Position Sensor Signal | I | — |
| 3 | 0.5 | YE/BK | 7478 | Rotary Position Sensor Low Reference | I | — |

# B150 Fuel Tank Pressure Sensor (-LM2)



4589538

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33343864
Service Connector: 19356431
Description: 3-Way F 150 MX Series, Sealed (GY)

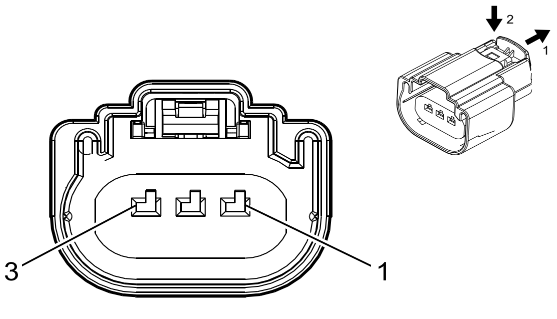
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B150 Fuel Tank Pressure Sensor (-LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/WH | 890 | Fuel Tank Pressure Sensor Signal | I | — |
| 2 | 0.5 | BK/BN | 6284 | Fuel Tank Vapor Pressure Sensor Low Reference | I | — |
| 3 | 0.5 | YE/RD | 2709 | Fuel Tank Pressure Sensor 5V Reference | I | — |

# B152LF Suspension Position Sensor - Left Front (Z45)



4589538

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33343864
Service Connector: 19356431
Description: 3-Way F 150 MX Series, Sealed (GY)

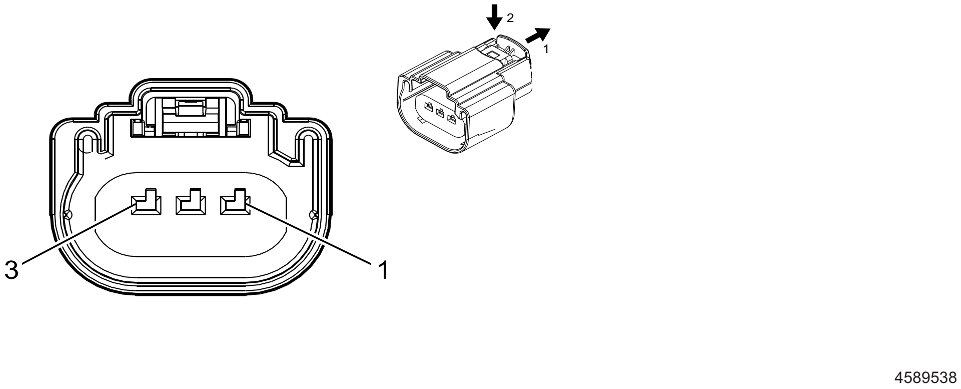
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B152LF Suspension Position Sensor - Left Front (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/RD | 1205 | Left Front Strut Position Sensor 5V Reference | I | — |
| 2 | 0.5 | BK/BU | 1206 | Left Front Strut Position Sensor Low Reference | I | — |
| 3 | 0.5 | BN/WH | 1207 | Left Front Strut Position Sensor Signal | I | — |

# B152R Suspension Position Sensor - Rear (Z45)



## Connector Part Information

Harness Type: Chassis
OEM Connector: 33343864
Service Connector: 19356431
Description: 3-Way F 150 MX Series, Sealed (GY)

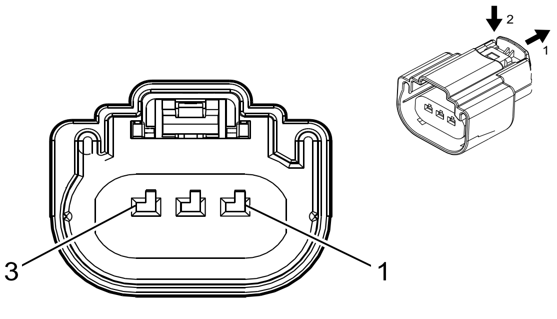
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B152R Suspension Position Sensor - Rear (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/RD | 1208 | Left Rear Strut Position Sensor 5V Reference | I | — |
| 2 | 0.5 | BK/GN | 1209 | Left Rear Strut Position Sensor Low Reference | I | — |
| 3 | 0.5 | GN/WH | 1210 | Left Rear Strut Position Sensor Signal | I | — |

# B152RF Suspension Position Sensor - Right Front (Z45)



## Connector Part Information

Harness Type: Chassis
OEM Connector: 33343864
Service Connector: 19356431
Description: 3-Way F 150 MX Series, Sealed (GY)

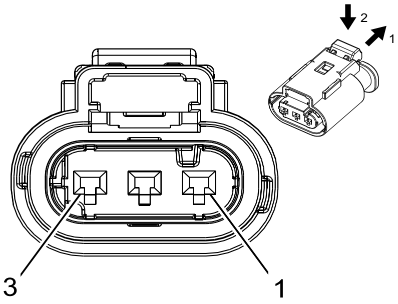
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B152RF Suspension Position Sensor - Right Front (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/RD | 1211 | Right Front Strut Position Sensor 5V Reference | I | — |
| 2 | 0.5 | BK/GY | 1212 | Right Front Strut Position Sensor Low Reference | I | — |
| 3 | 1 | YE/WH | 1213 | Right Front Strut Position Sensor Signal | I | — |

# B154 Diesel Particulate Filter Exhaust Differential Pressure Sensor (LM2)



2717069

## Connector Part Information

Harness Type: Engine
OEM Connector: 13763990
Service Connector: 19299690
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

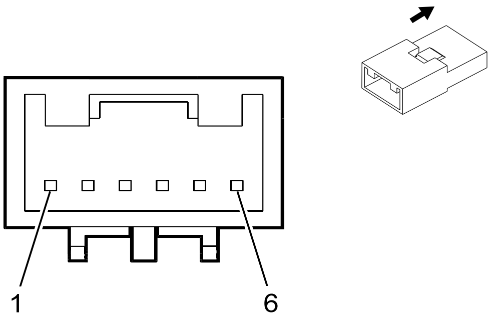
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B154 Diesel Particulate Filter Exhaust Differential Pressure Sensor (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 2 | 0.5 | BU | 6053 | Exhaust Pressure Sensor Signal 1 | I | — |
| 3 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |

# B160 Windshield Temperature and Inside Moisture Sensor (ASV)



2839920

## Connector Part Information

Harness Type: Headliner
OEM Connector: 13770074
Service Connector: 19299681
Description: 6-Way M 0.64 Kaizen Series (BK)

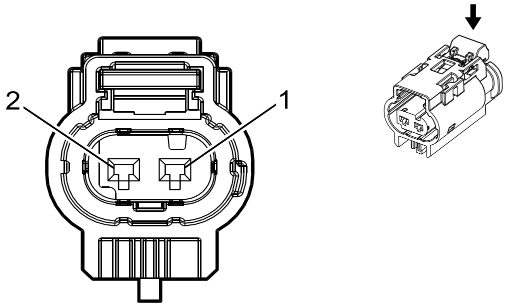
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-65B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B160 Windshield Temperature and Inside Moisture Sensor (ASV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE/RD | 597 | 5V Reference | I | — |
| 2 | 0.35 | GY/BU | 7564 | Humidity Sensor Signal | I | — |
| 3 | 0.35 | BK/BU | 7566 | Humidity/Windscreen Temp Sensor Low Reference | I | — |
| 4 | 0.35 | GY/GN | 7565 | Windscreen Temp Sensor Signal | I | — |
| 5 | 0.35 | YE/BU | 3197 | Humidity Temperature Sensor Signal | I | — |
| 6 | — | — | — | Not Occupied | — | — |

# B172LF Brake Pad Wear Sensor - Left Front



3747581

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33226772
Service Connector: 19332719
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

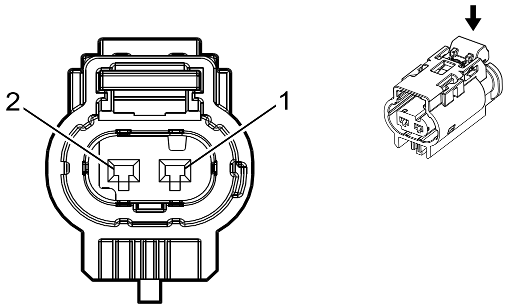
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B172LF Brake Pad Wear Sensor - Left Front

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 1612 | Brake Lining Wear Sensor Signal Left Front | I | — |
| 2 | 0.75 | BK/WH | 1751 | Signal Ground | I | — |

# B172LR Brake Pad Wear Sensor - Left Rear



3747581

## Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 13583195
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B172LR Brake Pad Wear Sensor - Left Rear

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GN | 1616 | Brake Lining Wear Sensor Signal Rear | I | Z45 |
| 2 | 0.75 | BK/WH | 1751 | Signal Ground | I | Z45 |

# B174G Frontview Camera - Grille (UV2)

—

## Connector Part Information

Harness Type: Frontview Camera Grille
OEM Connector: 13514000
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

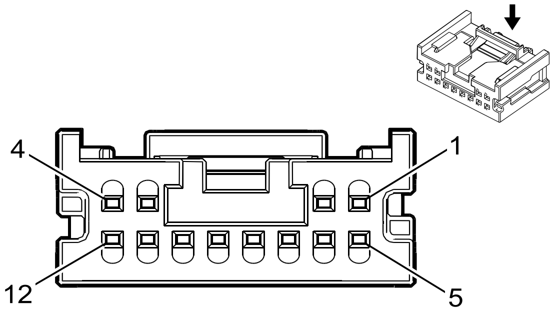
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B174G Frontview Camera - Grille (UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| BK | — | — | COAX | Coax Cable | I | — |

# B174W Frontview Camera - Windshield (UEU/UHX)



3824362

## Connector Part Information

Harness Type: Headliner
OEM Connector: 33235297
Service Connector: 13507121
Description: 12-Way F Mini 50 Series (BK)

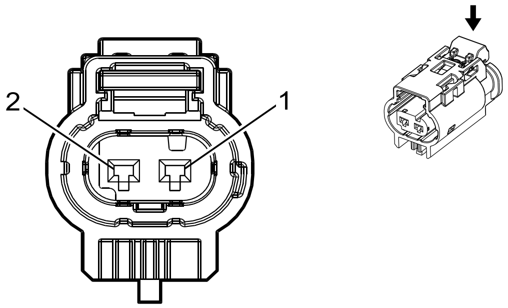
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19333221 | EL-35616-58 (BK) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## B174W Frontview Camera - Windshield (UEU/UHX)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BK/WH | 1851 | Signal Ground | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | RD/GN | 3140 | Battery Positive Voltage | I | — |
| 4 | 0.35 | WH | 3152 | Lane Departure Warning Indicator Control | I | — |
| 5 | 0.35 | BU/GY | 3935 | High Speed GMLAN Serial Data (+) 8 | I | — |
| 6 | 0.35 | WH/GY | 3936 | High Speed GMLAN Serial Data (-) 8 | I | — |
| 7 | 0.35 | BU/GY | 3935 | High Speed GMLAN Serial Data (+) 8 | I | — |
| 8 | 0.35 | WH/GY | 3936 | High Speed GMLAN Serial Data (-) 8 | I | — |
| 9 | 0.35 | WH/BU | 5986 | Serial Data Communication Enable | I | — |
| 10 | 0.35 | GY/WH | 3153 | Lane Departure Warning Disable Switch Signal | I | — |
| 11 | 0.35 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 12 | — | — | — | Not Occupied | — | — |

# B193A Charge Air Cooler Inlet Temperature Sensor (LM2)



3747581

## Connector Part Information

Harness Type: Engine
OEM Connector: 33226772
Service Connector: 19332719
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

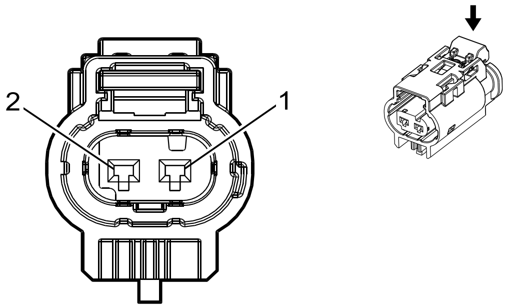
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B193A Charge Air Cooler Inlet Temperature Sensor (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN | 3683 | Charge Air Cooler Inlet Temperature Sensor Signal | I | — |
| 2 | 0.5 | YE/BK | 3682 | Charge Air Cooler Inlet Temperature Sensor Low Reference | I | — |

# B193B Charge Air Cooler Outlet Temperature Sensor (LM2)



3747581

## Connector Part Information

Harness Type: Engine
OEM Connector: 33226772
Service Connector: 19332719
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

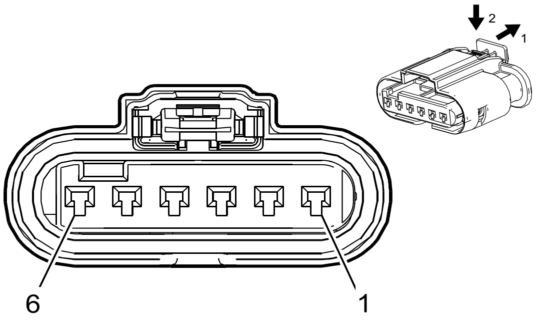
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B193B Charge Air Cooler Outlet Temperature Sensor (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 3681 | Charge Air Cooler Outlet Temperature Sensor Signal | I | — |
| 2 | 0.5 | YE/BU | 3680 | Charge Air Cooler Outlet Temperature Sensor Low Reference | I | — |

## B195A Nitrogen Oxides Sensor 1 (LM2)



3960142

### Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

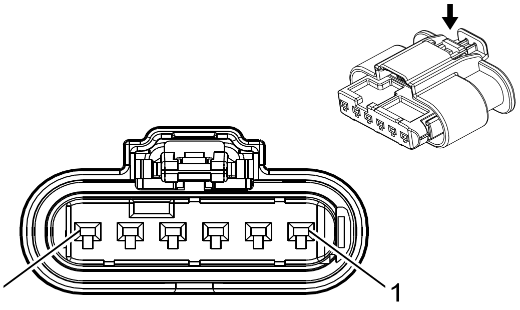
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B195A Nitrogen Oxides Sensor 1 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BU | 3674 | NOx Sensor 1 Control | I | — |
| 2 | 0.5 | BU/BN | 4498 | High Speed GMLAN Serial Data (+) 7 | I | — |
| 3 | 0.5 | BU/BN | 4498 | High Speed GMLAN Serial Data (+) 7 | I | — |
| 4 | 0.5 | WH | 4499 | High Speed GMLAN Serial Data (-) 7 | I | — |
| 5 | 0.5 | WH | 4499 | High Speed GMLAN Serial Data (-) 7 | I | — |
| 6 | 0.5 | BK/WH | 451 | Signal Ground | I | — |

# B195B Nitrogen Oxides Sensor 2 (LM2)



4455148

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33226735
Service Connector: 19353875
Description: 6-Way F 1.2 MCON-LL Series, Sealed (GY)

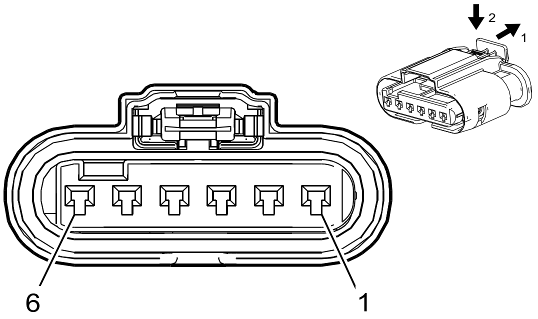
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B195B Nitrogen Oxides Sensor 2 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BU | 3674 | NOx Sensor 1 Control | I | — |
| 2 | 0.5 | BU/BN | 4498 | High Speed GMLAN Serial Data (+) 7 | I | — |
| 3 | 0.5 | BU/BN | 4498 | High Speed GMLAN Serial Data (+) 7 | I | — |
| 4 | 0.5 | WH | 4499 | High Speed GMLAN Serial Data (-) 7 | I | — |
| 5 | 0.5 | WH | 4499 | High Speed GMLAN Serial Data (-) 7 | I | — |
| 6 | 0.5 | BK/WH | 1651 | Signal Ground | I | — |

# B195C Nitrogen Oxides Sensor 3 (LM2)



3960142

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

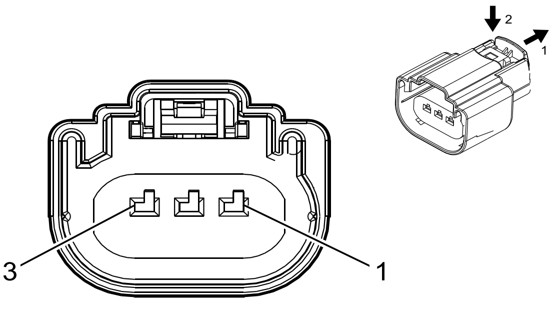
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B195C Nitrogen Oxides Sensor 3 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BU | 3674 | NOx Sensor 1 Control | I | — |
| 2 | 0.5 | BU/BN | 4498 | High Speed GMLAN Serial Data (+) 7 | I | — |
| 3 | 0.5 | BU/BN | 4498 | High Speed GMLAN Serial Data (+) 7 | I | — |
| 4 | 0.5 | WH | 4499 | High Speed GMLAN Serial Data (-) 7 | I | — |
| 5 | 0.5 | WH | 4499 | High Speed GMLAN Serial Data (-) 7 | I | — |
| 6 | 0.5 | BK/WH | 1651 | Signal Ground | I | — |

# B198 Fuel Composition Sensor (FHS)



4829227

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33362826
Service Connector: 19371197
Description: 3-Way F 150 MX Series, Sealed (GY)

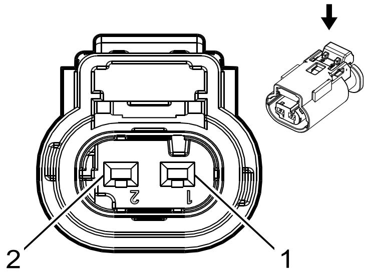
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B198 Fuel Composition Sensor (FHS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | I | — |
| 2 | 0.5 | BK/WH | 451 | Signal Ground | I | — |
| 3 | 0.5 | WH | 1579 | Fuel Temperature/Composition Signal | I | — |

# B203 Radiator Coolant Temperature Sensor (L3B/LM2)



2717066

## Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

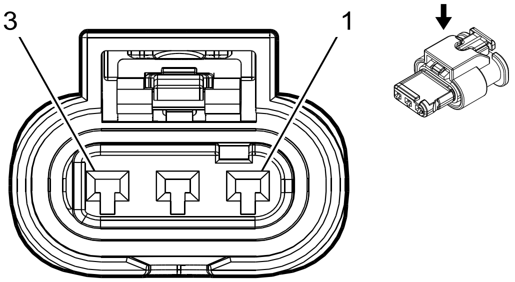
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B203 Radiator Coolant Temperature Sensor (L3B/LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/BK | 3000 | Coolant Temperature Sensor 2 Signal | I | — |
| 2 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | L3B |
|  | 0.5 | BK/GY | 626 | Engine Control Sensors Low Reference (3) | I | LM2 |

# B212 Reductant Sensor Module (LM2)



2750649

## Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 13722729
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON Series, Sealed (BK)

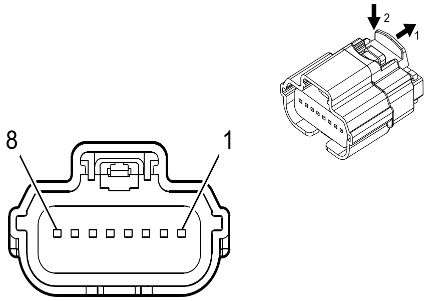
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B212 Reductant Sensor Module (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | — | — | I | — |
| 2 | 0.5 | BN | — | — | I | — |
| 3 | 0.5 | BK | — | — | I | — |

## B218L Side Object Sensor Module - Left (UKC)



4708234

### Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 33204059
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed (BK)

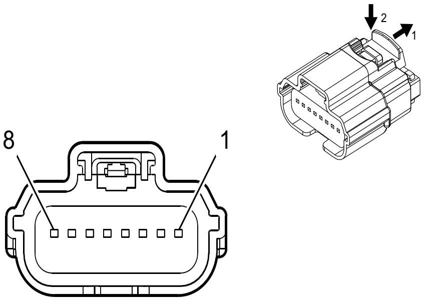
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B218L Side Object Sensor Module - Left (UKC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/YE | 3810 | High Speed GMLAN Serial Data (-) 5 | I | — |
| 2 | 0.5 | BU/WH | 3812 | High Speed GMLAN Serial Data (+) 5 | I | — |
| 3 | 0.5 | BK/WH | 1751 | Signal Ground | I | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 7 | 0.35 | GY/YE | 1760 | Left Side Object Detection LED Control | I | — |
| 8 | 0.5 | RD/GN | 1840 | Battery Positive Voltage | I | — |

# B218R Side Object Sensor Module - Right (UKC)



4708234

## Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 33204059
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 64 Series, Sealed (BK)

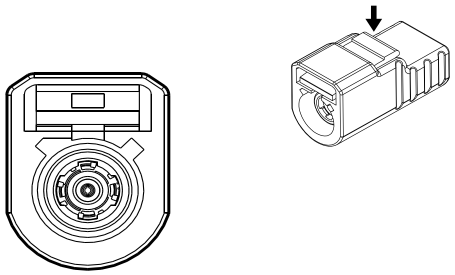
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B218R Side Object Sensor Module - Right (UKC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/YE | 3810 | High Speed GMLAN Serial Data (-) 5 | I | — |
| 2 | 0.5 | BU/WH | 3812 | High Speed GMLAN Serial Data (+) 5 | I | — |
| 3 | 0.5 | BK/WH | 1751 | Signal Ground | I | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 7 | 0.35 | GY | 1761 | Right Side Object Detection LED Control | I | — |
| 8 | 0.5 | RD/GN | 1840 | Battery Positive Voltage | I | — |

# B225L Sideview Camera - Left (UV2/UVI)



## Connector Part Information

Harness Type: Driver Outside Rearview Mirror COAX
OEM Connector: 13514007
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BK)

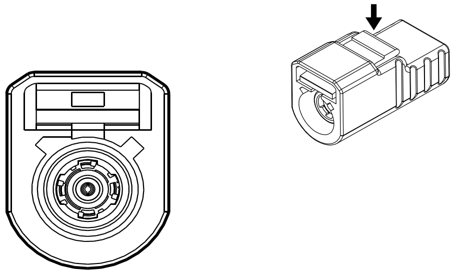
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B225L Sideview Camera - Left (UV2/UVI)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | Coaxial Antenna TV1 Signal | I | — |

## B225R Sideview Camera - Right (UV2/UVI)


4883521

### Connector Part Information

Harness Type: Passenger Outside Rearview Mirror COAX
OEM Connector: 13514007
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BK)

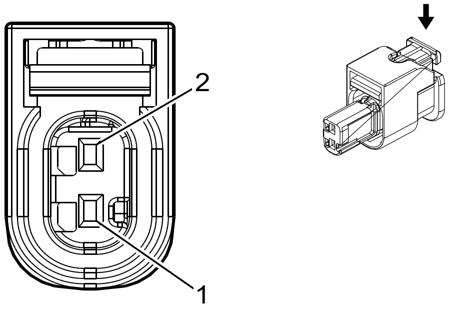
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B225R Sideview Camera - Right (UV2/UVI)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | Coaxial Antenna TV2 Signal | I | — |

# B280 Automatic Transmission Accumulator Solenoid Valve (MQE)



4051102

## Connector Part Information

Harness Type: Transmission
OEM Connector: 2138873-4
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BN)

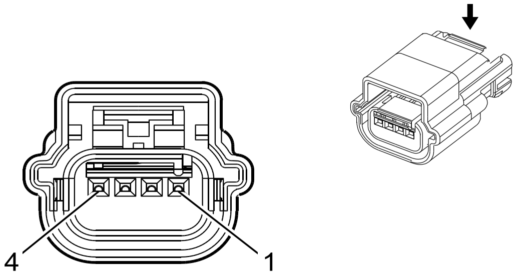
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B280 Automatic Transmission Accumulator Solenoid Valve (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/GY | 6387 | Transmission High Side Driver 1 Signal Driver | I | — |
| 2 | 0.5 | WH/GY | 4578 | Surge Accumulator Solenoid Low Side Control | I | — |

# B303 Transmission Range Sensor (MQB)



4789353

## Connector Part Information

Harness Type: Transmission Case
OEM Connector: 6006314801
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Series, Sealed (BK)

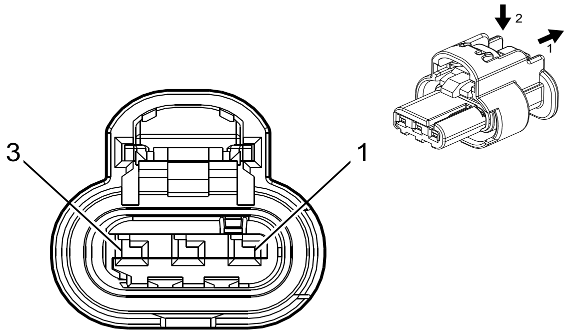
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | - | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B303 Transmission Range Sensor (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/GY | 3927 | IMS Mode Switch Low Reference | I | — |
| 2 | 0.5 | YE | 5724 | Ignition Mode Switch Mode Control | I | — |
| 3 | 0.5 | YE/GY | 5726 | Ignition Mode Switch Mode Control Backup | I | — |
| 4 | 0.5 | OG | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |

## B306A Parking Assist Sensor - Front Left Outer (UD5)



4581126

### Connector Part Information

Harness Type: Front Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

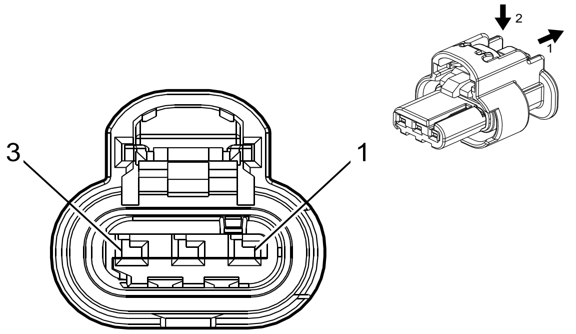
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### B306A Parking Assist Sensor - Front Left Outer (UD5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/VT | 5213 | Front Parking Left/Right/Mid Sensor | I | — |
| 2 | 0.5 | VT/WH | 5215 | Front Parking Left Corner Sensor | I | — |
| 3 | 0.5 | BK/BU | 5214 | Front Parking Sensor Low Reference | I | — |

# B306B Parking Assist Sensor - Front Left Middle (UD5)



4581126

## Connector Part Information

Harness Type: Front Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

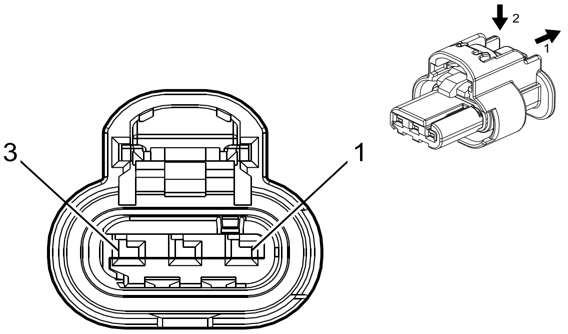
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B306B Parking Assist Sensor - Front Left Middle (UD5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/VT | 5213 | Front Parking Left/Right/Mid Sensor | I | — |
| 2 | 0.5 | YE/GY | 5216 | Front Parking Left Mid Sensor | I | — |
| 3 | 0.5 | BK/BU | 5214 | Front Parking Sensor Low Reference | I | — |

# B306C Parking Assist Sensor - Front Right Middle (UD5)



4581126

## Connector Part Information

Harness Type: Front Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

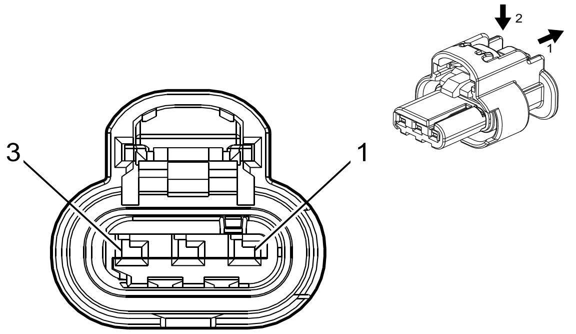
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B306C Parking Assist Sensor - Front Right Middle (UD5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/VT | 5213 | Front Parking Left/Right/Mid Sensor | I | — |
| 2 | 0.5 | VT/GY | 5218 | Front Parking Right Mid Sensor | I | — |
| 3 | 0.5 | BK/BU | 5214 | Front Parking Sensor Low Reference | I | — |

# B306D Parking Assist Sensor - Front Right Outer (UD5)



4581126

## Connector Part Information

Harness Type: Front Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

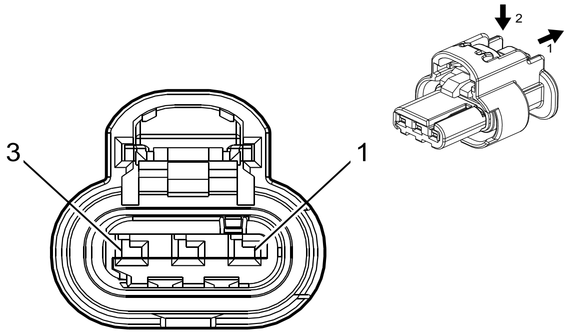
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B306D Parking Assist Sensor - Front Right Outer (UD5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/VT | 5213 | Front Parking Left/Right/Mid Sensor | I | — |
| 2 | 0.5 | WH/GY | 5217 | Front Parking Right Corner Sensor | I | — |
| 3 | 0.5 | BK/BU | 5214 | Front Parking Sensor Low Reference | I | — |

# B306E Parking Assist Sensor - Rear Left Outer (UD5/UD7)



4581126

## Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

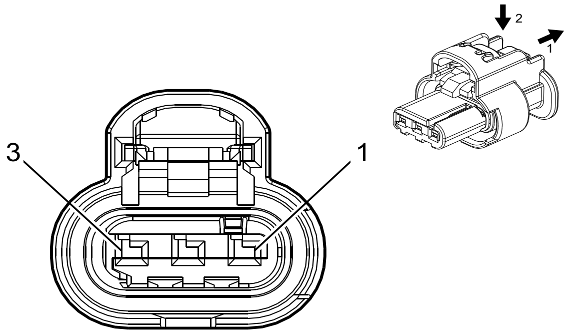
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B306E Parking Assist Sensor - Rear Left Outer (UD5/UD7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/WH | 2374 | Object Sensor Control | I | — |
| 2 | 0.5 | YE | 2375 | Left Rear Corner Object Sensor Signal | I | — |
| 3 | 0.5 | BK/GY | 2379 | Object Sensor Low Reference | I | — |

# B306F Parking Assist Sensor - Rear Left Middle (UD5/UD7)



4581126

## Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

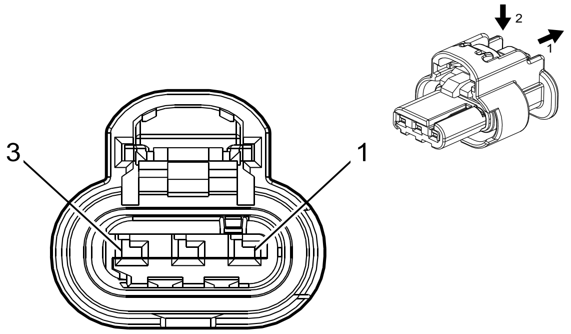
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B306F Parking Assist Sensor - Rear Left Middle (UD5/UD7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/WH | 2374 | Object Sensor Control | I | — |
| 2 | 0.5 | YE/BU | 2376 | Left Rear Middle Object Sensor Signal | I | — |
| 3 | 0.5 | BK/GY | 2379 | Object Sensor Low Reference | I | — |

# B306G Parking Assist Sensor - Rear Right Middle (UD5/UD7)



4581126

## Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

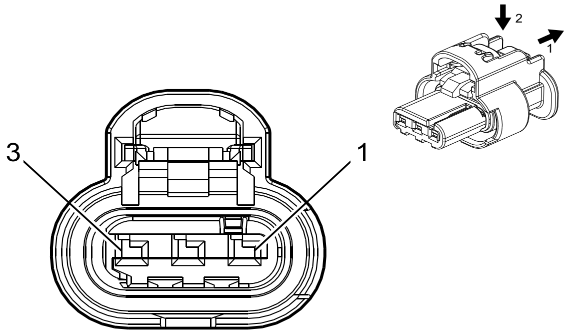
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B306G Parking Assist Sensor - Rear Right Middle (UD5/UD7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/WH | 2374 | Object Sensor Control | I | — |
| 2 | 0.5 | YE/WH | 2377 | Right Rear Middle Object Sensor Signal | I | — |
| 3 | 0.5 | BK/GY | 2379 | Object Sensor Low Reference | I | — |

# B306H Parking Assist Sensor - Rear Right Outer (UD5/UD7)



4581126

## Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 33358800
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

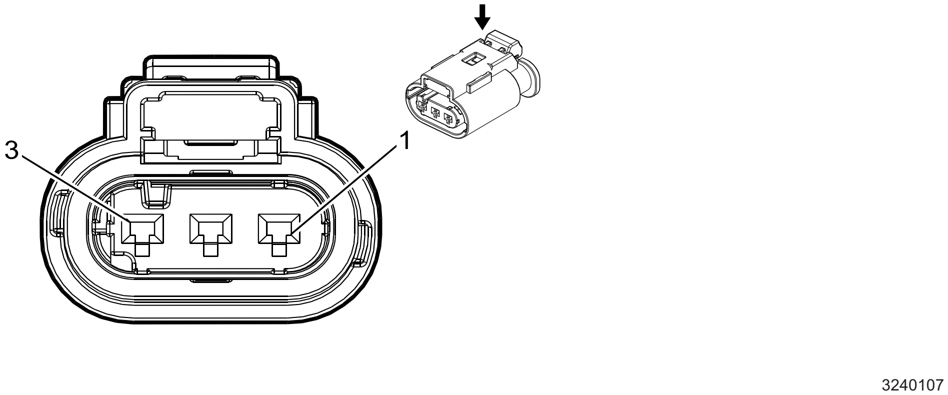
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B306H Parking Assist Sensor - Rear Right Outer (UD5/UD7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/WH | 2374 | Object Sensor Control | I | — |
| 2 | 0.5 | YE/VT | 2378 | Right Rear Corner Object Sensor Signal | I | — |
| 3 | 0.5 | BK/GY | 2379 | Object Sensor Low Reference | I | — |

# B310 Fuel Pressure/Temperature Sensor (L3B)



## Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13503573
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

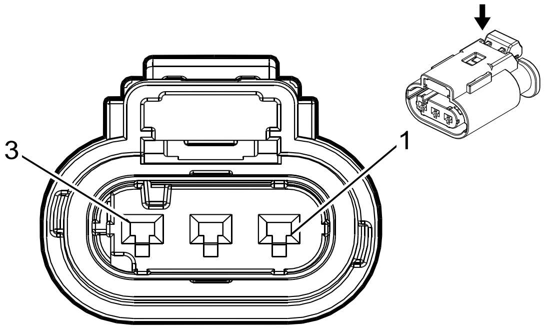
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B310 Fuel Pressure/Temperature Sensor (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |
| 2 | 0.5 | BU/WH | 2918 | Fuel Rail Pressure Sensor Signal | I | — |
| 3 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |

# B310 Fuel Pressure/Temperature Sensor (LV3/L82/L84/L87)



3240107

## Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13503573
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 Multilock Series, Sealed (BK)

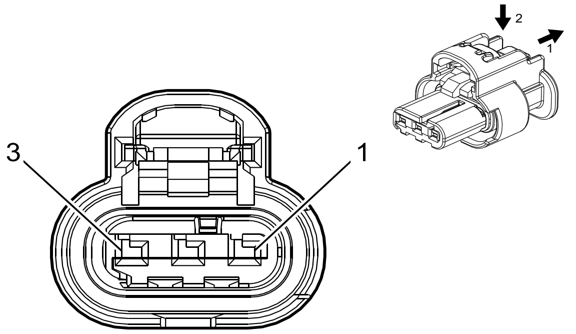
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B310 Fuel Pressure/Temperature Sensor (LV3/L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/GN | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 2 | 0.5 | BU/WH | 2918 | Fuel Rail Pressure Sensor Signal | I | — |
| 3 | 0.5 | BN/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |

# B321 Crankcase Pressure Sensor (LM2)



4778903

## Connector Part Information

Harness Type: Engine
OEM Connector: 33358808
Service Connector: 19369810
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

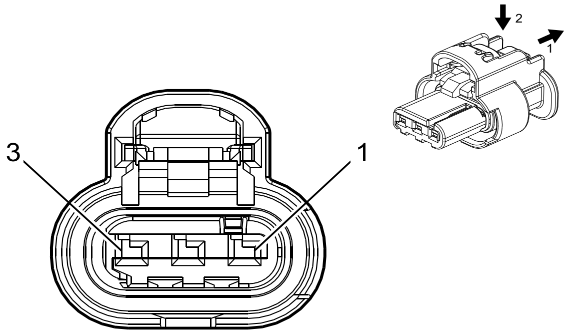
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B321 Crankcase Pressure Sensor (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | LM2 |
| 2 | 0.5 | YE/GY | 3926 | Crankcase Differential Pressure Sensor Signal | I | LM2 |
| 3 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | LM2 |

# B338A Intake Camshaft Profile Actuator Position Sensor 1 (L3B)



4581126

## Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

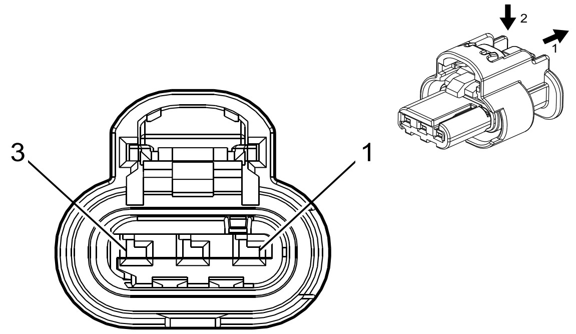
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B338A Intake Camshaft Profile Actuator Position Sensor 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 2 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |
| 3 | 0.5 | VT/WH | 3744 | Camshaft Intake Lobe Axial Position Signal (1) | I | — |

# B338B Intake Camshaft Profile Actuator Position Sensor 2 (L3B)



4581126

## Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

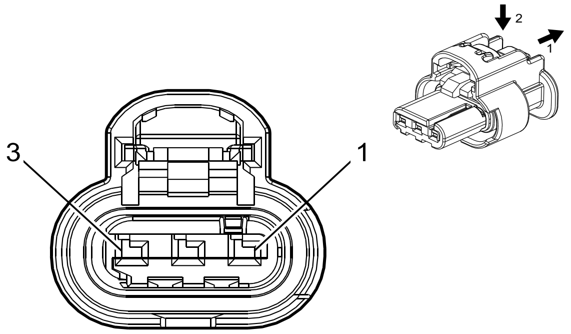
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B338B Intake Camshaft Profile Actuator Position Sensor 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 2 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |
| 3 | 0.5 | VT/GN | 3745 | Camshaft Intake Lobe Axial Position Signal (2) | I | — |

# B339A Exhaust Camshaft Profile Actuator Position Sensor 1 (L3B)



4581126

## Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

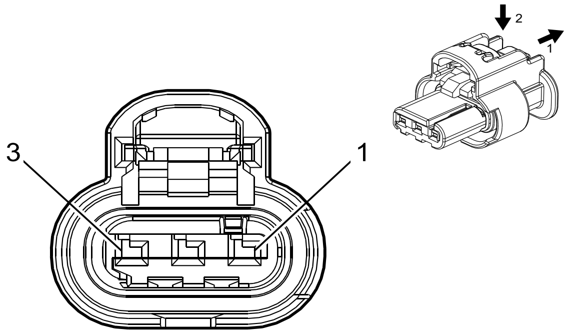
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B339A Exhaust Camshaft Profile Actuator Position Sensor 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 2 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |
| 3 | 0.5 | YE/WH | 3746 | Camshaft Exhaust Lobe Axial Position Signal (1) | I | — |

# B339B Exhaust Camshaft Profile Actuator Position Sensor 2 (L3B)



4581126

## Connector Part Information

Harness Type: Engine
OEM Connector: 33358800
Service Connector: 19366844
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

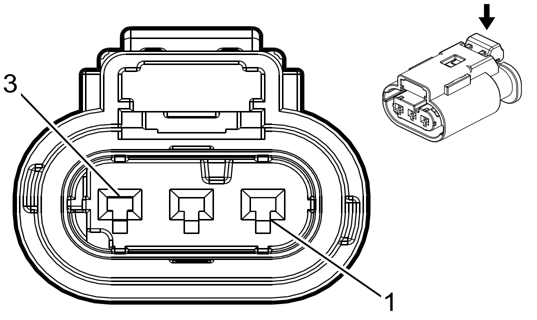
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B339B Exhaust Camshaft Profile Actuator Position Sensor 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 2 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |
| 3 | 0.5 | YE/GN | 3747 | Camshaft Exhaust Lobe Axial Position Signal (2) | I | — |

# B345R Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation (LM2)



2687961

## Connector Part Information

Harness Type: Engine
OEM Connector: 13863839
Service Connector: 13422451
Description: 3-Way F 1.2 Multilock Series, Sealed (NA)

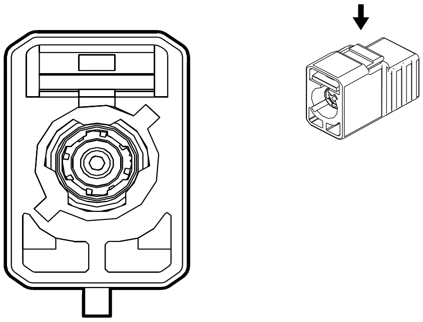
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B345R Exhaust Pressure Differential Sensor - Exhaust Gas Recirculation (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 2 | 0.5 | VT/GY | 7246 | Exhaust Gas Recirculation Differential Pressure Signal | I | — |
| 3 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |

# B352 Video Display Inside Rearview Mirror Camera (DRZ)



3293625

## Connector Part Information

Harness Type: Rearview Camera Jumper LVDS
OEM Connector: 13583914
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BU)

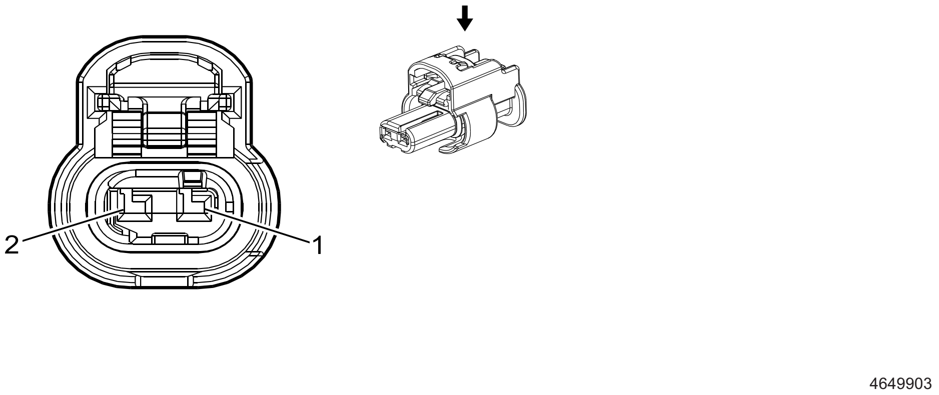
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## B352 Video Display Inside Rearview Mirror Camera (DRZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | LVDS | — | Auxiliary Video Signal | I | — |

# E2A Marker Lamp - Endgate



## Connector Part Information

Harness Type: Endgate
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E2A Marker Lamp - Endgate

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/VT | 1430 | Exterior Courtesy Lamp Control | I | — |
| 2 | 0.75 | BK | 1450 | Ground | I | — |

# E2LF Side Marker Lamp - Left Front (GF2/GF5/GPZ)

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## Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E2LF Side Marker Lamp - Left Front (GF2/GF5/GPZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 709 | Left Park Lamp Control | I | — |
| 3 | — | BK | 150 | Ground | I | — |

# E2LR Side Marker Lamp - Left Rear (GF3/GF5)

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### Connector Part Information

Harness Type: Left Taillamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: —

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E2LR Side Marker Lamp - Left Rear (GF3/GF5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BN | 709 | Left Park Lamp Control | I | — |
| 2 | — | BK | 1450 | Ground | I | — |

# E2RF Side Marker Lamp - Right Front (GF2/GF5/GPZ)

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## Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E2RF Side Marker Lamp - Right Front (GF2/GF5/GPZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 309 | Right Park Lamp Control | I | — |
| 3 | — | BK | 250 | Ground | I | — |

# E2RR Side Marker Lamp - Right Rear (GF3/GF5)

—

## Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E2RR Side Marker Lamp - Right Rear (GF3/GF5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BN | 309 | Right Park Lamp Control | I | — |
| 2 | — | BK | 1750 | Ground | I | — |

# E4E Headlamp - Left High Beam (GF2/GF5/GPZ)

—

## Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E4E Headlamp - Left High Beam (GF2/GF5/GPZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 711 | Left Headlamp High Beam Control | I | — |
| 2 | — | BK | 150 | Ground | I | — |

# E4F Headlamp - Right High Beam (GF2/GF5/GPZ)

—

## Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### E4F Headlamp - Right High Beam (GF2/GF5/GPZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 311 | Right Headlamp High Beam Control | I | — |
| 2 | — | BK | 250 | Ground | I | — |

# E4G Headlamp - Left Low Beam (GF2/GF5/GPZ)

—

## Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E4G Headlamp - Left Low Beam (GF2/GF5/GPZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 712 | Left Headlamp Low Beam Control | I | — |
| 2 | — | BK | 150 | Ground | I | — |

# E4H Headlamp - Right Low Beam (GF2/GF5/GPZ)

—

## Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E4H Headlamp - Right Low Beam (GF2/GF5/GPZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 312 | Right Headlamp Low Beam Control | I | — |
| 2 | — | BK | 250 | Ground | I | — |

# E4LF Turn Signal Lamp - Left Front (GF3/GF4/GF9/GFC)

—

### Connector Part Information

Harness Type: Left Headlamp
OEM Connector: L90002902
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E4LF Turn Signal Lamp - Left Front (GF3/GF4/GF9/GFC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 2 | — | BK | 1314 | Left Front Turn Signal Lamp Control | I | — |
| 3 | — | BK | 150 | Ground | I | — |

# E4N Park/Turn Signal Lamp - Left (GF2/GF5/GPZ)

—

## Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### E4N Park/Turn Signal Lamp - Left (GF2/GF5/GPZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 709 | Left Park Lamp Control | I | — |
| 2 | — | BK | 1314 | Left Front Turn Signal Lamp Control | I | — |
| 3 | — | BK | 150 | Ground | I | — |

# E4P Park/Turn Signal Lamp - Right (GF2/GF5/GPZ)

—

## Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### E4P Park/Turn Signal Lamp - Right (GF2/GF5/GPZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 309 | Right Park Lamp Control | I | — |
| 2 | — | BK | 1315 | Right Front Turn Signal Lamp Control | I | — |
| 3 | — | BK | 250 | Ground | I | — |

# E4RF Turn Signal Lamp - Right Front (GF3/GF4/GF9/GFC)

—

## Connector Part Information

Harness Type: —
OEM Connector: L90002902
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E4RF Turn Signal Lamp - Right Front (GF3/GF4/GF9/GFC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 2 | — | BK | 1315 | Right Front Turn Signal Lamp Control | I | — |
| 3 | — | BK | 250 | Ground | I | — |

# E5A Backup Lamp - Left (GF3/GF5/GFF/GFI/GFJ)

—

## Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E5A Backup Lamp - Left (GF3/GF5/GFF/GFI/GFJ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GN | 24 | Backup Lamp Control | I | — |
| 2 | — | BK | 1450 | Ground | I | — |

# E5B Backup Lamp - Right (GF3/GF5/GFF/GFI/GFJ)

—

## Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

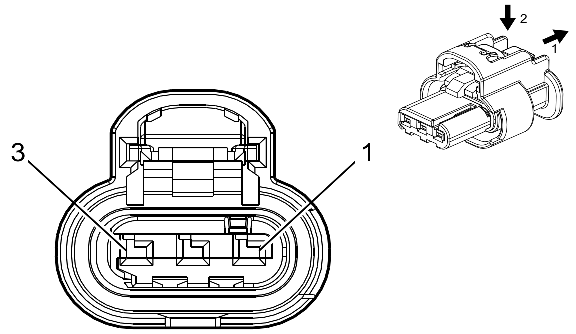
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E5B Backup Lamp - Right (GF3/GF5/GFF/GFI/GFJ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GN | 24 | Backup Lamp Control | I | — |
| 2 | — | BK | 1750 | Ground | I | — |

# E6 Center High Mounted Stop Lamp (Extended Cab/Crew Cab)



4581126

## Connector Part Information

Harness Type: Center High Mounted Stop Lamp Jumper
OEM Connector: 33276797
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

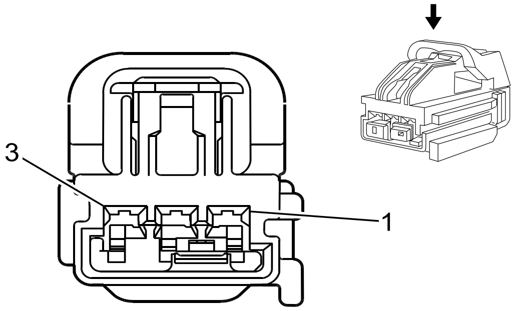
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E6 Center High Mounted Stop Lamp (Extended Cab/Crew Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH/VT | 1430 | Exterior Courtesy Lamp Control | I | — |
| 2 | 0.35 | VT/WH | 5065 | Stop Lamp Relay Coil Control | I | — |
| 3 | 0.35 | BK | 1050 | Ground | I | — |

# E6 Center High Mounted Stop Lamp (Regular Cab)



1787799

### Connector Part Information

Harness Type: Headliner
OEM Connector: 10847008
Service Connector: 19149536
Description: 3-Way F 1.5 Kaizen Series (L-GY)

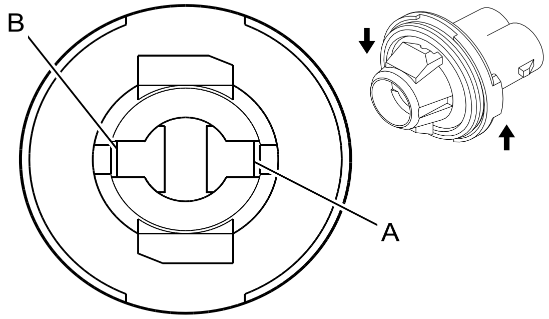
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### E6 Center High Mounted Stop Lamp (Regular Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH/VT | 1430 | Exterior Courtesy Lamp Control | I | — |
| 2 | 0.5 | VT/GY | 1054 | Stop Lamp Control | I | — |
| 3 | 0.35 | BK | 1050 | Ground | I | — |

# E7 License Plate Lamp (ZW9)



744036

## Connector Part Information

Harness Type: License Lamp Jumper
OEM Connector: 15324946
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F Lamp Socket Wedge Base, Type W-2 (D-GY)

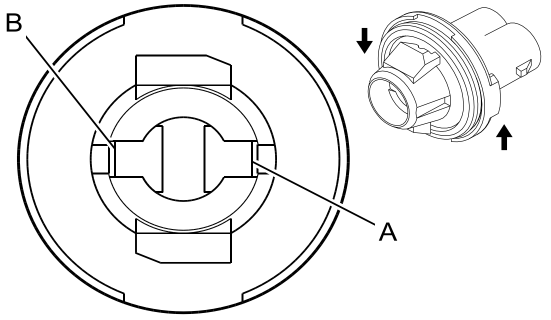
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E7 License Plate Lamp (ZW9)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | — | GN/YE | 6846 | Rear License Lamp Control | I | — |
| B | — | BK | 1450 | Ground | I | — |

# E7L License Plate Lamp - Left (E63)



744036

## Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 15324946
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F Lamp Socket Wedge Base, Type W-2 (D-GY)

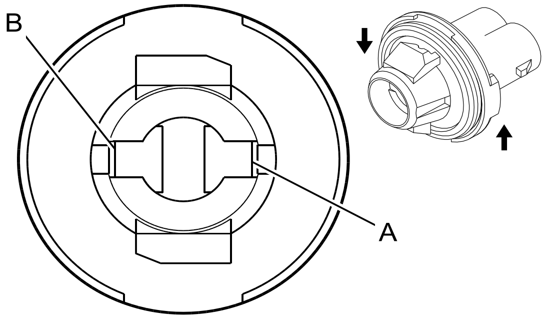
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E7L License Plate Lamp - Left (E63)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 0.5 | GN/YE | 6846 | Rear License Lamp Control | I | — |
| B | 0.5 | BK | 1450 | Ground | I | — |

# E7R License Plate Lamp - Right (E63)



744036

### Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 15324946
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F Lamp Socket Wedge Base, Type W-2 (D-GY)

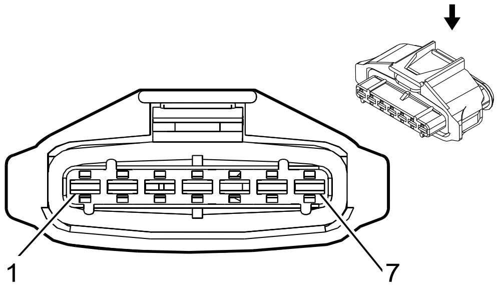
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E7R License Plate Lamp - Right (E63)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 0.5 | GN/YE | 6846 | Rear License Lamp Control | I | — |
| B | 0.5 | BK | 1450 | Ground | I | — |

# E11A Fuel Heater/Water in Fuel Sensor (LM2)



2537256

## Connector Part Information

Harness Type: Chassis
OEM Connector: 10774827
Service Connector: 19354080
Description: 7-Way F 2.8 Junior Power Timer Series, Sealed (BK)

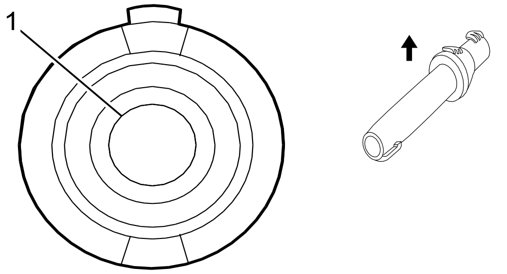
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E11A Fuel Heater/Water in Fuel Sensor (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1750 | Ground | I | — |
| 2 | 2.5 | VT/GN | 355 | Fuel Filter Heater Voltage | I | — |
| 3 | 0.5 | WH/RD | 6862 | Water In Fuel Sensor 5V Reference | I | — |
| 4 | 0.5 | BK/BU | 6863 | Water In Fuel Sensor Low Reference | I | — |
| 5 | 0.5 | BU/YE | 6861 | Water In Fuel Sensor Signal | I | — |
| 6 | 0.5 | BN/VT | 455 | Fuel Filter Temperature Signal | I | — |
| 7 | 0.5 | BK/VT | 412 | Fuel Filter Temperature Sensor Low Reference | I | — |

# E12A Glow Plug 1 (LM2)



2231591

## Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 55571433
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series (BK)

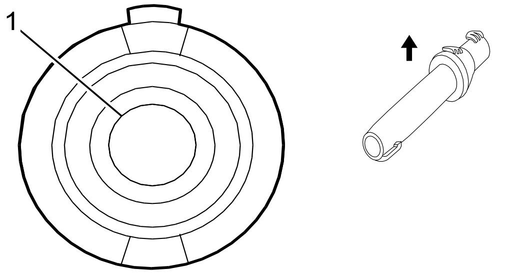
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E12A Glow Plug 1 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GY/BU | 1581 | Glow Plug Control 1 | I | — |

# E12B Glow Plug 2 (LM2)



## Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 55571433
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series (BK)

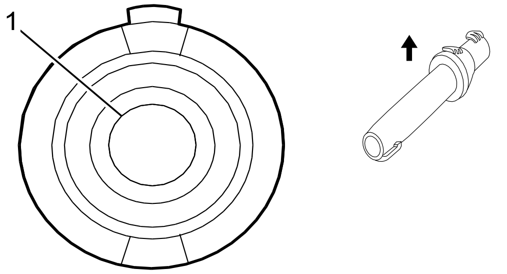
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E12B Glow Plug 2 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GY/BN | 1582 | Glow Plug Control 2 | I | — |

# E12C Glow Plug 3 (LM2)



2231591

## Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 55571433
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series (BK)

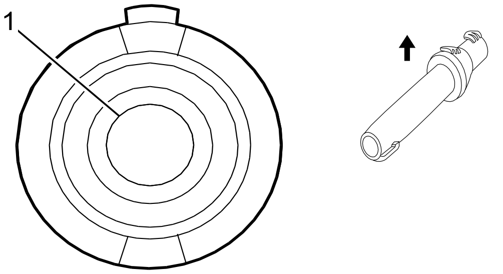
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E12C Glow Plug 3 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GY/GN | 1583 | Glow Plug Control 3 | I | — |

# E12D Glow Plug 4 (LM2)



## Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 55571433
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series (BK)

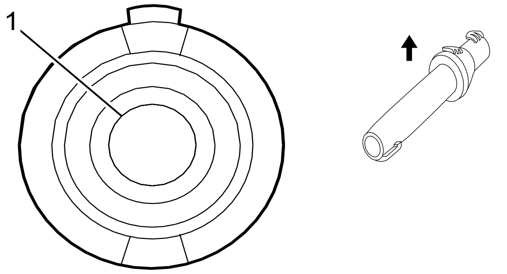
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E12D Glow Plug 4 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GY/YE | 1584 | Glow Plug Control 4 | I | — |

# E12E Glow Plug 5 (LM2)



2231591

## Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 55571433
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series (BK)

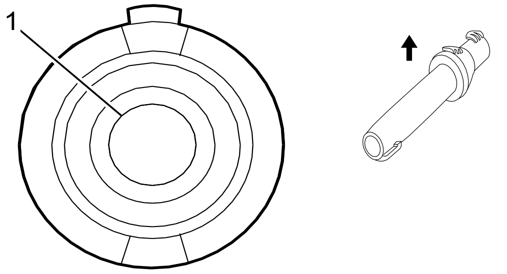
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E12E Glow Plug 5 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GY/WH | 1585 | Glow Plug Control 5 | I | — |

# E12F Glow Plug 6 (LM2)



2231591

## Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: 55571433
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F 4.0 Series (BK)

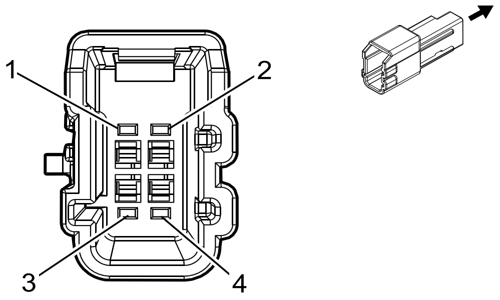
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E12F Glow Plug 6 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GY/VT | 1586 | Glow Plug Control 6 | I | — |

# E14A Seat Heating Element - Driver Back (KA1)



4293695

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-7781
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (GY)

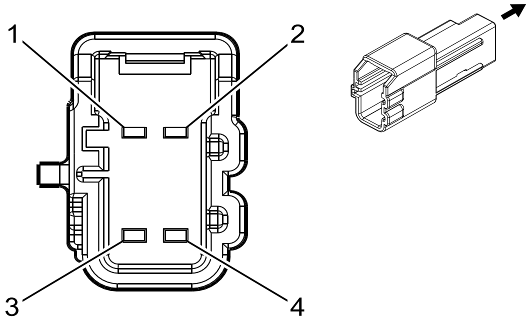
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-13 (BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E14A Seat Heating Element - Driver Back (KA1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN | 2432 | Driver Heated Back Element Control | I | — |
| 2 | 0.5 | BU | 2425 | Driver Heated Back NTC Signal | I | — |
| 3 | 0.5 | BK/VT | 2426 | Driver Heated Back NTC Low Reference | I | — |
| 4 | 0.75 | BN/BK | 2078 | Driver Heated Seat Element Low Reference | I | — |

# E14B Seat Heating Element - Driver Cushion (KA1)



4210503

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-7779
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (BK)

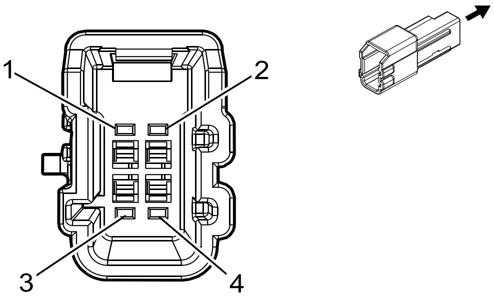
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-13 (BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E14B Seat Heating Element - Driver Cushion (KA1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN/VT | 2077 | Driver Heated Seat Element Control | I | — |
| 2 | 0.5 | YE/GY | 2079 | Driver Heated Seat NTC Signal | I | — |
| 3 | 0.5 | BK/YE | 2080 | Driver Heated Seat NTC Low Reference | I | — |
| 4 | 0.75 | BN/BK | 2078 | Driver Heated Seat Element Low Reference | I | — |

# E14C Seat Heating Element - Passenger Back (KA1)



4293695

## Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-7781
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (GY)

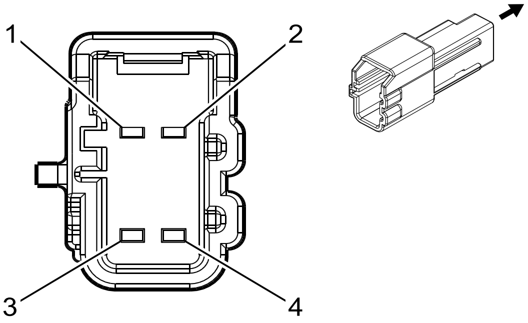
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-13 (BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E14C Seat Heating Element - Passenger Back (KA1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | WH/BN | 2481 | Passenger Heated Back Element Control | I | — |
| 2 | 0.5 | WH/BU | 2436 | Passenger Heated Back NTC Signal | I | — |
| 3 | 0.5 | BK/GN | 2482 | Passenger Heated Back NTC Low Reference | I | — |
| 4 | 0.75 | GY/BK | 2480 | Passenger Heated Seat Element Low Reference | I | — |

# E14D Seat Heating Element - Passenger Cushion (KA1)



4210503

## Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-7779
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (BK)

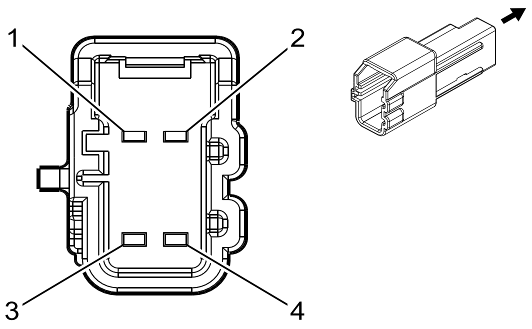
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-13 (BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E14D Seat Heating Element - Passenger Cushion (KA1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN/BU | 2479 | Passenger Heated Seat Element Control | I | — |
| 2 | 0.5 | WH/GY | 2434 | Passenger Heated Seat NTC Signal | I | — |
| 3 | 0.5 | BK/GY | 2435 | Passenger Heated Seat NTC Low Reference | I | — |
| 4 | 0.75 | GY/BK | 2480 | Passenger Heated Seat Element Low Reference | I | — |

# E14F Seat Heating Element - Left Rear Cushion (KA6)



4210503

## Connector Part Information

Harness Type: Rear Seat
OEM Connector: 6098-7779
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (BK)

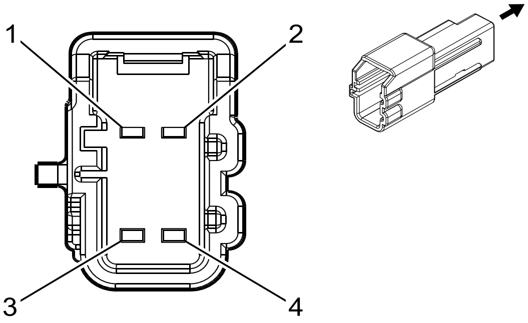
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-13 (BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E14F Seat Heating Element - Left Rear Cushion (KA6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GY | 2294 | Left Rear Heated Seat Cushion Element Control | I | — |
| 2 | 0.75 | WH/BU | 7047 | Left Rear Cushion NTC Signal | I | — |
| 3 | 0.75 | BU/WH | 7048 | Left Rear Cushion NTC Low Reference | I | — |
| 4 | 0.75 | BN/BK | 2295 | Left Rear Heated Seat Cushion Element Low Reference | I | — |

# E14H Seat Heating Element - Right Rear Cushion (KA6)



4210503

## Connector Part Information

Harness Type: Rear Seat
OEM Connector: 6098-7779
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (BK)

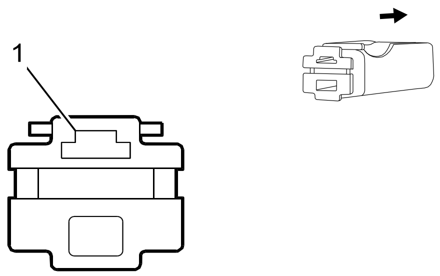
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-13 (BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E14H Seat Heating Element - Right Rear Cushion (KA6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GN/BN | 2296 | Right Rear Heated Seat Cushion Element Control | I | — |
| 2 | 0.75 | YE/WH | 7053 | Right Rear Cushion NTC Signal | I | — |
| 3 | 0.75 | WH/BK | 7054 | Right Rear Cushion NTC Low Reference | I | — |
| 4 | 0.75 | GN/BK | 2297 | Right Rear Heated Seat Cushion Element Low Reference | I | — |

# E18 Rear Defogger Grid X1



1413086

## Connector Part Information

Harness Type: Body
OEM Connector: 13511619
Service Connector: 19367647
Description: 1-Way F 250 Series (BK)

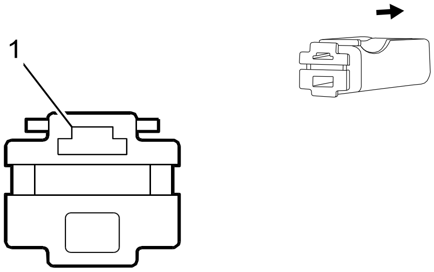
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-42 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E18 Rear Defogger Grid X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BN/VT | 293 | Rear Defog Element Control | I | — |

# E18 Rear Defogger Grid X2



1413086

## Connector Part Information

Harness Type: Body
OEM Connector: 13511619
Service Connector: 19367647
Description: 1-Way F 250 Series (BK)

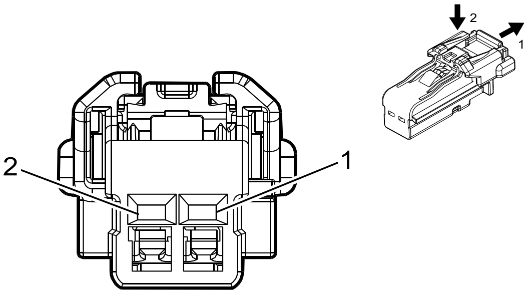
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-42 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E18 Rear Defogger Grid X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1350 | Ground | I | — |

# E28 Center Console Compartment Lamp



4115691

## Connector Part Information

Harness Type: Floor Console
OEM Connector: 35026312
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

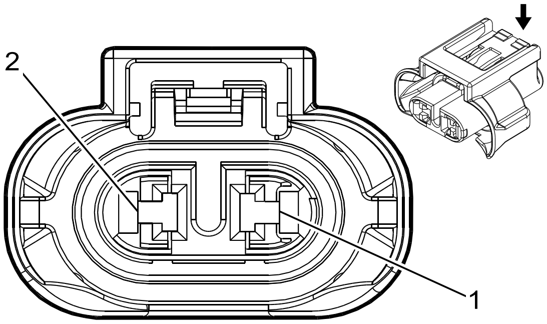
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E28 Center Console Compartment Lamp

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 1150 | Ground | I | — |
| 2 | 0.5 | WH/BN | 6815 | Inadvertent Power Control | I | — |

# E29LF Fog Lamp - Left Front (T3U)



3404058

## Connector Part Information

Harness Type: Front Fascia
OEM Connector: 13818129
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 APEX Series, Sealed (BK)

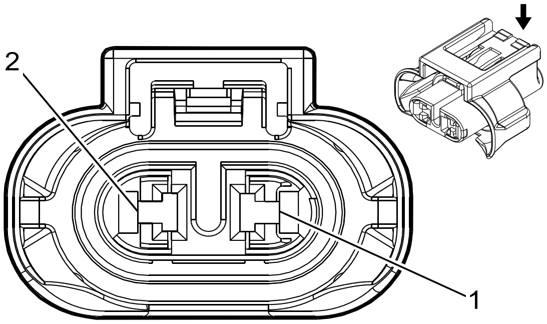
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E29LF Fog Lamp - Left Front (T3U)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/VT | 2234 | Front Fog Lamp Control | I | — |
| 2 | 0.5 | BK | 150 | Ground | I | — |

# E29RF Fog Lamp - Right Front (T3U)



3404058

## Connector Part Information

Harness Type: Front Fascia
OEM Connector: 13818129
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 APEX Series, Sealed (BK)

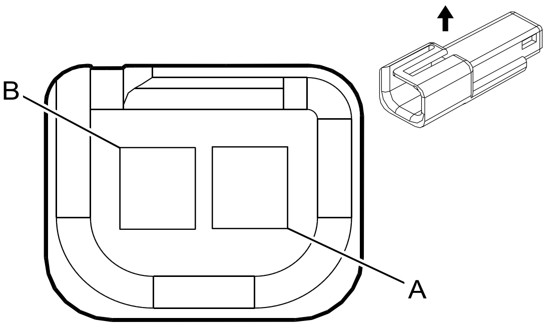
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E29RF Fog Lamp - Right Front (T3U)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/VT | 2234 | Front Fog Lamp Control | I | — |
| 2 | 0.5 | BK | 250 | Ground | I | — |

# E31L Sunshade Mirror Lamp - Left (DH6)



35441

## Connector Part Information

Harness Type: Headliner
OEM Connector: 12047663
Service Connector: 13584278
Description: 2-Way M 150 Metri-Pack Series (BK)

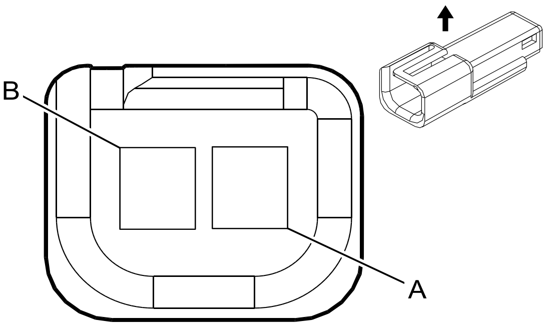
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E31L Sunshade Mirror Lamp - Left (DH6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 0.5 | WH/BN | 6815 | Inadvertent Power Control | I | — |
| B | 0.5 | BK | 1050 | Ground | I | — |

# E31R Sunshade Mirror Lamp - Right (DH6)



## Connector Part Information

Harness Type: Headliner
OEM Connector: 12047663
Service Connector: 13584278
Description: 2-Way M 150 Metri-Pack Series (BK)

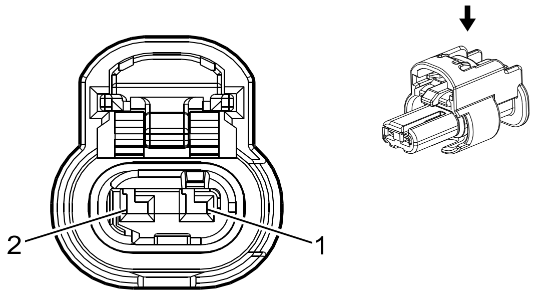
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E31R Sunshade Mirror Lamp - Right (DH6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 0.5 | WH/BN | 6815 | Inadvertent Power Control | I | — |
| B | 0.5 | BK | 1050 | Ground | I | — |

# E33L Cargo Lamp - Left (UF2)



4649903

## Connector Part Information

Harness Type: Left Taillamp
OEM Connector: 13512365
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

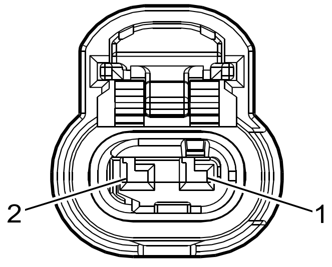
## Terminal Part Information

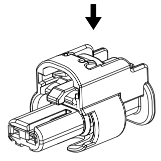
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E33L Cargo Lamp - Left (UF2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BU | 7762 | Cargo Bed Lamp Control | I | — |
| 2 | — | BK | 1450 | Ground | I | — |

# E33R Cargo Lamp - Right (UF2)





4649903

## Connector Part Information

Harness Type: Right Taillamp
OEM Connector: 13512365
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

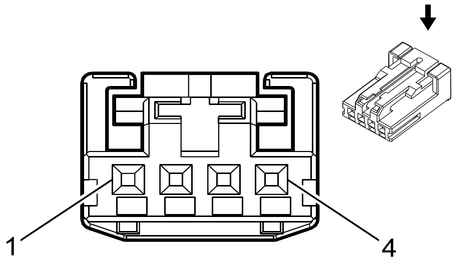
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E33R Cargo Lamp - Right (UF2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BU | 7762 | Cargo Bed Lamp Control | I | — |
| 2 | — | BK | 1750 | Ground | I | — |

# E37B Dome/Reading Lamps - 2nd Row (Extended Cab/Crew Cab)



2717162

## Connector Part Information

Harness Type: Headliner
OEM Connector: 13969166
Service Connector: 13587297
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E37B Dome/Reading Lamps - 2nd Row (Extended Cab/Crew Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD/YE | 240 | Battery Positive Voltage | I | — |
| 2 | 0.35 | GY | 157 | Interior Lamp Control | I | — |
| 3 | 0.5 | BK | 1050 | Ground | I | — |
| 4 | 0.5 | WH/BN | 6815 | Inadvertent Power Control | I | — |

# E40 Electrical Auxiliary Heater X1 (C32)

—

## Connector Part Information

Harness Type: Electrical Auxiliary Heater Jumper
OEM Connector: 13507723
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

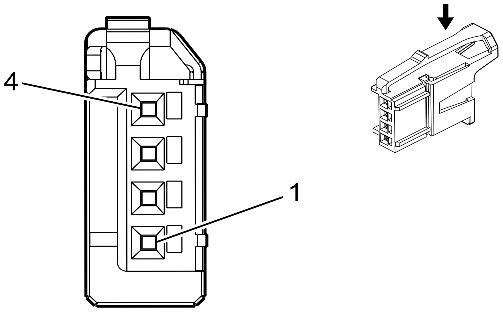
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E40 Electrical Auxiliary Heater X1 (C32)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 1050 | Ground | I | — |
| 2 | — | RD/GY | 642 | Battery Positive Voltage | I | — |

# E40 Electrical Auxiliary Heater X2 (C32)



4500098

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33250857
Service Connector: 19354403
Description: 4-Way F 0.64 Micro-Quadlock Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E40 Electrical Auxiliary Heater X2 (C32)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | VT | 3195 | Auxiliary Heater Control | I | — |
| 2 | 0.5 | VT/GY | 539 | Run/Crank Ignition 1 Voltage | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | BK | 1050 | Ground | I | — |

# E42L Tail Lamp Assembly - Left (GF2/GF4/GF9/GFC/GFD/GPZ)

—

## Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13503521
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F

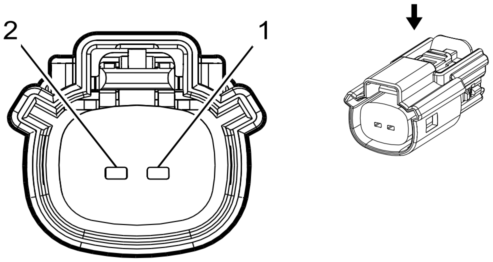
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E42L Tail Lamp Assembly - Left (GF2/GF4/GF9/GFC/GFD/GPZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN | 709 | Left Park Lamp Control | I | — |
| 2 | 0.75 | RD | 5356 | Left Tail Lamp Outage Detection Signal | I | — |
| 3 | 0.75 | GN | 18 | Left Rear Stop/Turn Lamp Control | I | — |
| 4 | 0.75 | BK | 1450 | Ground | I | — |

## E42L Tail Lamp Assembly - Left (GFF/GFI/GFJ)



2474713

### Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13583151
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series, Sealed (BK)

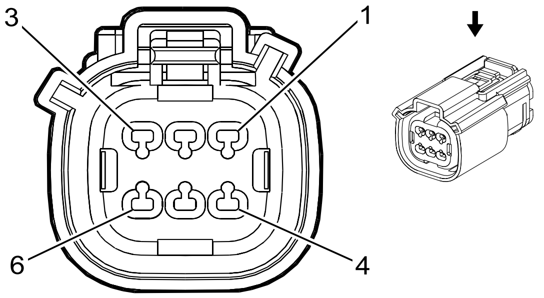
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### E42L Tail Lamp Assembly - Left (GFF/GFI/GFJ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 1450 | Ground | I | — |
| 2 | 0.75 | BN | 709 | Left Park Lamp Control | I | — |

# E42L Tail Lamp Assembly - Left (GFG/GFU/GFW)



3225042

## Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13592503
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 Series, Sealed (GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E42L Tail Lamp Assembly - Left (GFG/GFU/GFW)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN | 709 | Left Park Lamp Control | I | — |
| 2 | 0.75 | RD | 5356 | Left Tail Lamp Outage Detection Signal | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | GN | 24 | Backup Lamp Control | I | — |
| 5 | 0.75 | GN | 18 | Left Rear Stop/Turn Lamp Control | I | — |
| 6 | 0.75 | BK | 1450 | Ground | I | — |

# E42R Tail Lamp Assembly - Right (GF2/GF4/GF9/GFC/GFD/GPZ)

—

## Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13503521
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F

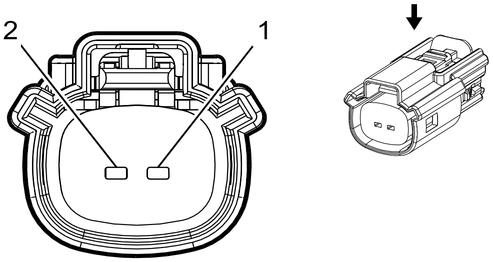
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E42R Tail Lamp Assembly - Right (GF2/GF4/GF9/GFC/GFD/GPZ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN | 309 | Right Park Lamp Control | I | — |
| 2 | 0.75 | RD | 5357 | Right Tail Lamp Outage Detection Signal | I | — |
| 3 | 0.75 | GN | 19 | Right Rear Stop/Turn Lamp Control | I | — |
| 4 | 0.75 | BK | 1750 | Ground | I | — |

## E42R Tail Lamp Assembly - Right (GFF/GFI/GFJ)



2474713

### Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13583151
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series, Sealed (BK)

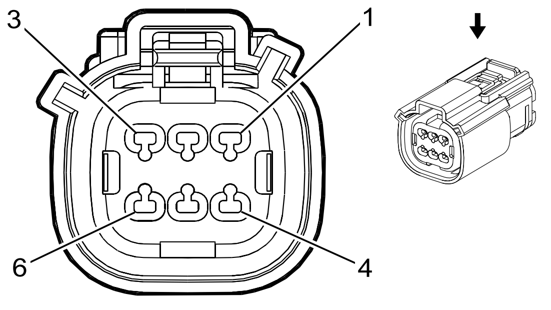
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### E42R Tail Lamp Assembly - Right (GFF/GFI/GFJ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 1750 | Ground | I | — |
| 2 | 0.75 | BN | 309 | Right Park Lamp Control | I | — |

# E42R Tail Lamp Assembly - Right (GFG/GFU/GFW)



3225042

## Connector Part Information

Harness Type: Left Tail Lamp
OEM Connector: 13592503
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 Series, Sealed (GY)

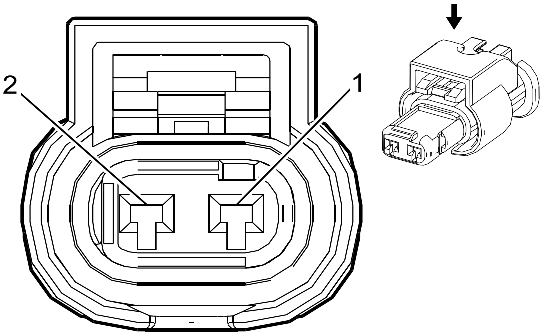
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E42R Tail Lamp Assembly - Right (GFG/GFU/GFW)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN | 309 | Right Park Lamp Control | I | — |
| 2 | 0.75 | RD | 5357 | Right Tail Lamp Outage Detection Signal | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | GN | 24 | Backup Lamp Control | I | — |
| 5 | 0.75 | GN | 19 | Right Rear Stop/Turn Lamp Control | I | — |
| 6 | 0.75 | BK | 1750 | Ground | I | — |

# E52 Reductant Line Heater (LM2)



2474752

## Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 13927761
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCP Series, Sealed (BK)

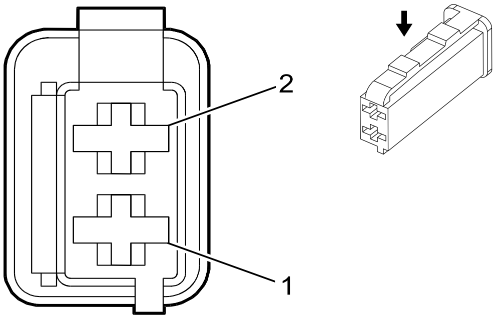
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E52 Reductant Line Heater (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.0 | BK | — | — | I | — |
| 2 | 1.0 | BK | — | — | I | — |

# E63D Flood Lamp - Driver Door Handle (AU3)



2339593

## Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 13670097
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.6 Timer Series (BK)

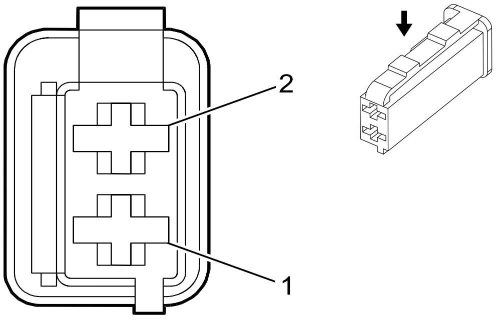
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E63D Flood Lamp - Driver Door Handle (AU3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH/YE | 7557 | LED Ambient Lighting Control 1 | I | — |
| 2 | 0.35 | BK | 1150 | Ground | I | — |

# E63P Flood Lamp - Passenger Door Handle (AU3)



2339593

## Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 13670097
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.6 Timer Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## E63P Flood Lamp - Passenger Door Handle (AU3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH/YE | 7557 | LED Ambient Lighting Control 1 | I | — |
| 2 | 0.75 | BK | 1250 | Ground | I | — |

# F101 Passenger Instrument Panel Air Bag X1

—

## Connector Part Information

Harness Type: Passenger Instrument Panel Air Bag Jumper
OEM Connector: 13598467
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

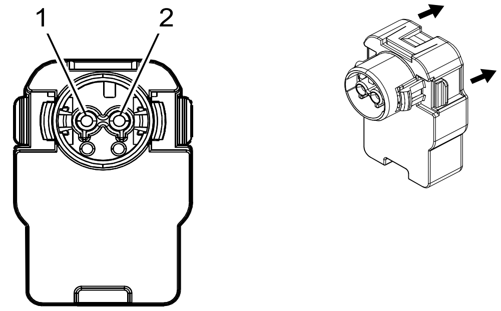
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F101 Passenger Instrument Panel Air Bag X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | YE/OG | 3025 | Passenger IP Module Stage 1 High Control | I | — |
| 2 | — | OG/WH | 3024 | Passenger IP Module Stage 1 Low Control | I | — |

# F101 Passenger Instrument Panel Air Bag X2



4772246

## Connector Part Information

Harness Type: Passenger Instrument Panel Air Bag Jumper
OEM Connector: 13598468
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.0 Series (PU with YE Cover)

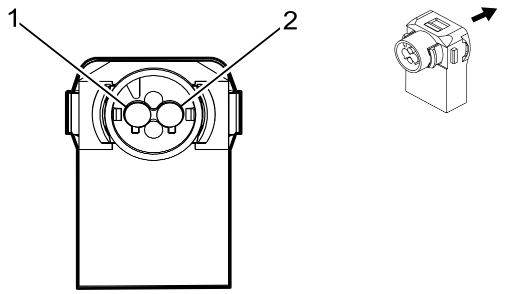
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F101 Passenger Instrument Panel Air Bag X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GY/OG | 3027 | Passenger IP Module Stage 2 High Control | I | — |
| 2 | — | OG/VT | 3026 | Passenger IP Module Stage 2 Low Control | I | — |

# F105L Roof Rail Air Bag - Left (Crew Cab)



4679778

## Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series (GY with YE Cover)

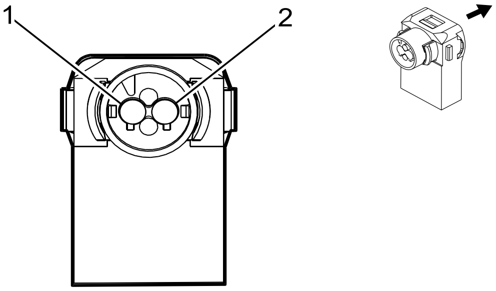
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F105L Roof Rail Air Bag - Left (Crew Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/GN | 5019 | Left Front Head Curtain Module High Control | I | — |
| 2 | 0.5 | VT/OG | 5020 | Left Front Head Curtain Module Low Control | I | — |

# F105L Roof Rail Air Bag - Left (Extended Cab)



4679778

## Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series (GY with YE Cover)

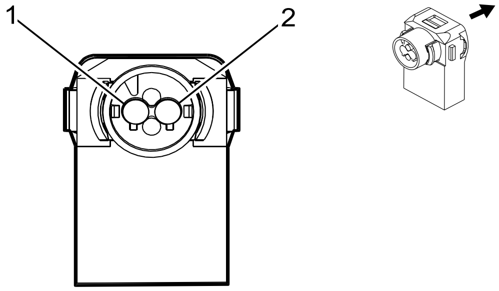
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F105L Roof Rail Air Bag - Left (Extended Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/GN | 5019 | Left Front Head Curtain Module High Control | I | — |
| 2 | 0.5 | VT/OG | 5020 | Left Front Head Curtain Module Low Control | I | — |

## F105L Roof Rail Air Bag - Left (Regular Cab)



4679778

### Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series (GY with YE Cover)

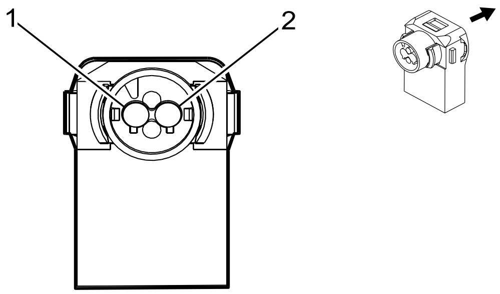
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### F105L Roof Rail Air Bag - Left (Regular Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/GN | 5019 | Left Front Head Curtain Module High Control | I | — |
| 2 | 0.5 | VT/OG | 5020 | Left Front Head Curtain Module Low Control | I | — |

# F105R Roof Rail Air Bag - Right (Crew Cab)



4679778

## Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series (GY with YE Cover)

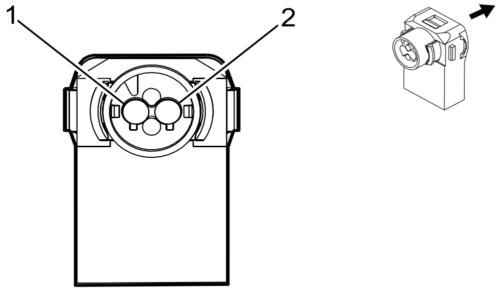
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F105R Roof Rail Air Bag - Right (Crew Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/GY | 5021 | Right Front Head Curtain Module High Control | I | — |
| 2 | 0.5 | WH/OG | 5022 | Right Front Head Curtain Module Low Control | I | — |

# F105R Roof Rail Air Bag - Right (Extended Cab)



4679778

## Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series (GY with YE Cover)

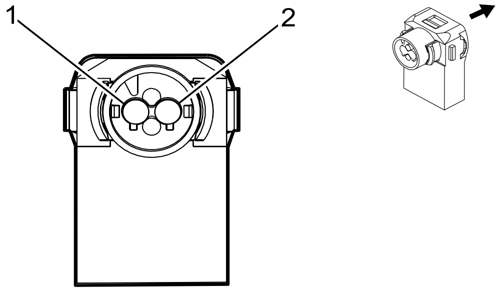
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F105R Roof Rail Air Bag - Right (Extended Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/GY | 5021 | Right Front Head Curtain Module High Control | I | — |
| 2 | 0.5 | WH/OG | 5022 | Right Front Head Curtain Module Low Control | I | — |

## F105R Roof Rail Air Bag - Right (Regular Cab)



4679778

### Connector Part Information

Harness Type: Body
OEM Connector: 33345783
Service Connector: 19355491
Description: 2-Way F ABX-5 Series (GY with YE Cover)

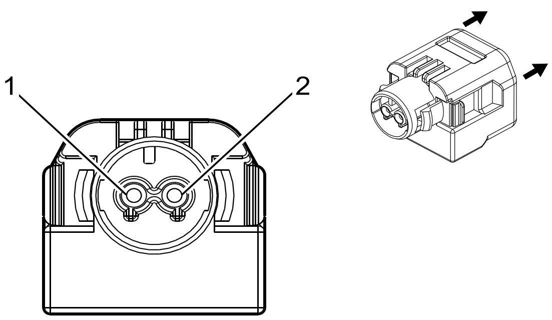
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### F105R Roof Rail Air Bag - Right (Regular Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/GY | 5021 | Right Front Head Curtain Module High Control | I | — |
| 2 | 0.5 | WH/OG | 5022 | Right Front Head Curtain Module Low Control | I | — |

# F106D Seat Side Air Bag - Driver



4772226

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 1801935-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.0 Series (PK with YE Cover)

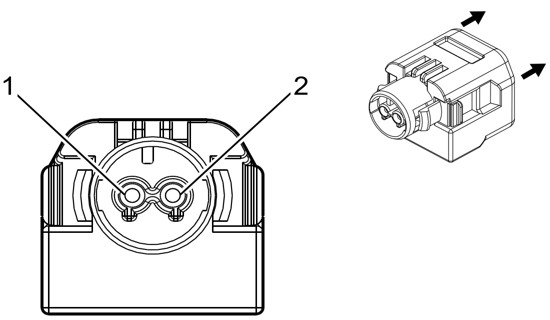
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F106D Seat Side Air Bag - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/BU | 3068 | Driver Side Impact Module High Control | I | — |
| 2 | 0.5 | BK/OG | 3069 | Driver Side Impact Module Low Control | I | — |

# F106P Seat Side Air Bag - Passenger



4772226

## Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 1801935-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.0 Series (PK with YE Cover)

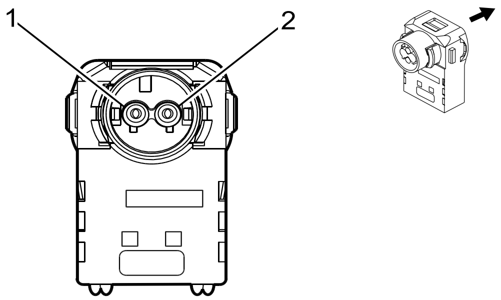
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F106P Seat Side Air Bag - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/GY | 3066 | Passenger Side Impact Module High Control | I | — |
| 2 | 0.5 | BU/OG | 3067 | Passenger Side Impact Module Low Control | I | — |

# F107 Steering Wheel Air Bag X1



4231869

## Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13596550
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.0 MAC Series (PK with YE Cover)

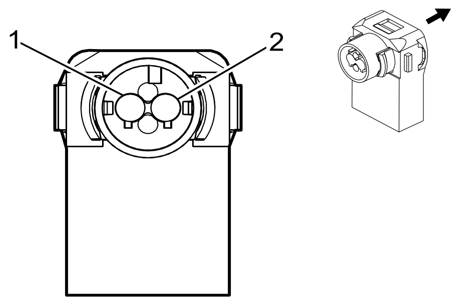
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F107 Steering Wheel Air Bag X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | YE/OG | 3021 | Steering Wheel Module Stage 1 High Control | I | — |
| 2 | — | OG/WH | 3020 | Steering Wheel Module Stage 1 Low Control | I | — |

# F107 Steering Wheel Air Bag X2



4241364

## Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13596551
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.0 MAC Series (PU with YE Cover)

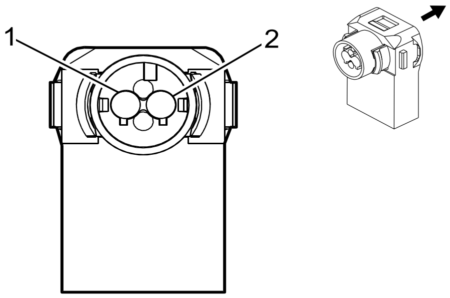
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F107 Steering Wheel Air Bag X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GY/OG | 3023 | Steering Wheel Module Stage 2 High Control | I | — |
| 2 | — | OG/VT | 3022 | Steering Wheel Module Stage 2 Low Control | I | — |

# F112D Seat Belt Retractor Pretensioner - Driver (Crew Cab/Extended Cab)



4241364

## Connector Part Information

Harness Type: Body
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series (PU with YE Cover)

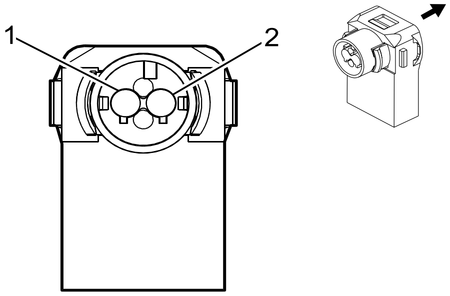
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F112D Seat Belt Retractor Pretensioner - Driver (Crew Cab/Extended Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/WH | 3477 | Driver Seat Belt Retractor Pretensioner High Control | I | — |
| 2 | 0.5 | GY/OG | 3478 | Driver Seat Belt Retractor Pretensioner Low Control | I | — |

# F112D Seat Belt Retractor Pretensioner - Driver (Regular Cab)



4241364

## Connector Part Information

Harness Type: Body
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series (PU with YE Cover)

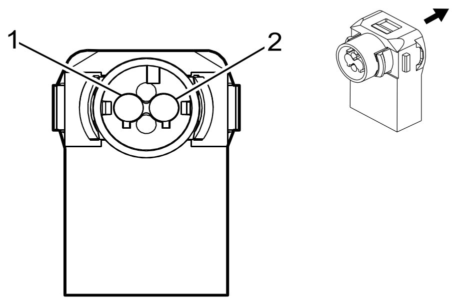
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F112D Seat Belt Retractor Pretensioner - Driver (Regular Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/WH | 3477 | Driver Seat Belt Retractor Pretensioner High Control | I | — |
| 2 | 0.5 | GY/OG | 3478 | Driver Seat Belt Retractor Pretensioner Low Control | I | — |

# F112P Seat Belt Retractor Pretensioner - Passenger (Crew Cab/Extended Cab)



## Connector Part Information

Harness Type: Body
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series (PU with YE Cover)

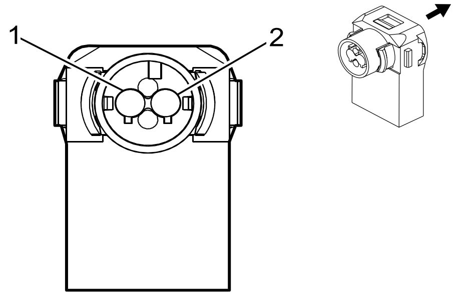
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F112P Seat Belt Retractor Pretensioner - Passenger (Crew Cab/Extended Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/GN | 3475 | Passenger Seat Belt Retractor Pretensioner High Control | I | — |
| 2 | 0.5 | WH/OG | 3476 | Passenger Seat Belt Retractor Pretensioner Low Control | I | — |

# F112P Seat Belt Retractor Pretensioner - Passenger (Regular Cab)



4241364

## Connector Part Information

Harness Type: Body
OEM Connector: 33345778
Service Connector: 19355490
Description: 2-Way F ABX-5 Series (PU with YE Cover)

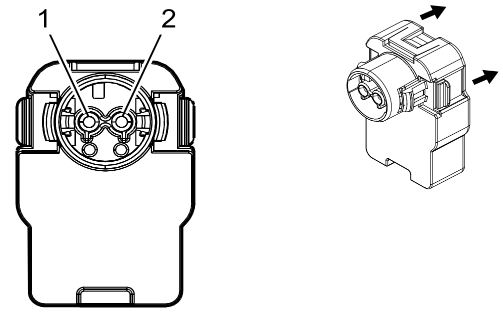
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F112P Seat Belt Retractor Pretensioner - Passenger (Regular Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | OG/GN | 3475 | Passenger Seat Belt Retractor Pretensioner High Control | I | — |
| 2 | 0.35 | WH/OG | 3476 | Passenger Seat Belt Retractor Pretensioner Low Control | I | — |

# F113D Seat Belt Anchor Pretensioner - Driver



4823732

## Connector Part Information

Harness Type: Body
OEM Connector: 1-1801930-1
Service Connector: 13598467
Description: 2-Way F 1.0 Series (PK with YE Cover)

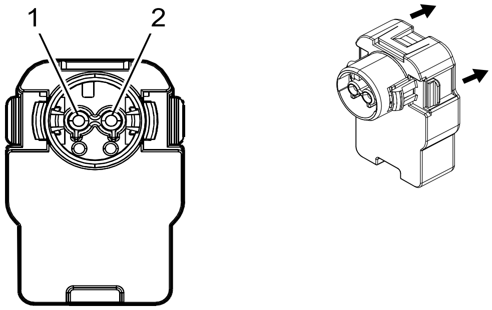
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## F113D Seat Belt Anchor Pretensioner - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/YE | 3481 | Driver Seat Belt Anchor Pretensioner High Control | I | — |
| 2 | 0.5 | YE/OG | 3482 | Driver Seat Belt Anchor Pretensioner Low Control | I | — |

## F113P Seat Belt Anchor Pretensioner - Passenger



4823732

### Connector Part Information

Harness Type: Body
OEM Connector: 1-1801930-1
Service Connector: 13598467
Description: 2-Way F 1.0 Series (PK with YE Cover)

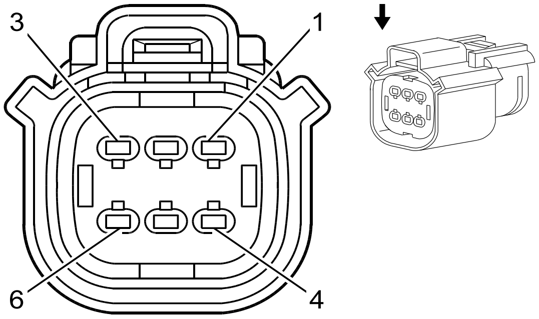
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### F113P Seat Belt Anchor Pretensioner - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | OG/BN | 3479 | Passenger Seat Belt Anchor Pretensioner High Control | I | — |
| 2 | 0.5 | GY/OG | 3480 | Passenger Seat Belt Anchor Pretensioner Low Control | I | — |

# G5 Transmission Fluid Pump - Electric/Auxiliary (MQB)



## Connector Part Information

Harness Type: Transmission Case
OEM Connector: 160038-3009
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F Sealed

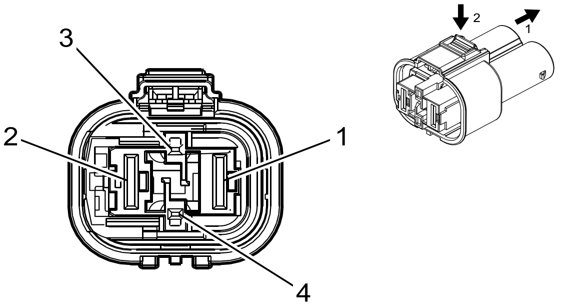
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## G5 Transmission Fluid Pump - Electric/Auxiliary (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN/VT | 8640 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Signal Driver | I | — |
| 4 | 0.5 | GY/OG | 2968 | Transmission Auxiliary Oil Pump Control | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 1.5 | BK/YE | 4450 | Ground | I | — |

# G10B Cooling Fan Motor - Lower (L3B)



4847569

## Connector Part Information

Harness Type: Engine
OEM Connector: 33376654
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2, 9.5 MCON Series (BK)

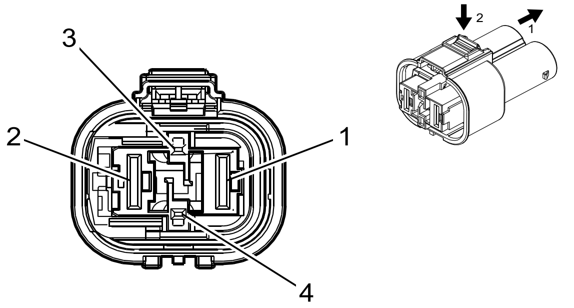
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-22 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## G10B Cooling Fan Motor - Lower (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 5 | BK | 4450 | Ground | II | L3B |
| 3 | 0.5 | BN/YE | 473 | High Speed Cooling Fan Relay Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

## G10B Cooling Fan Motor - Lower (LM2)



4847569

### Connector Part Information

Harness Type: Engine
OEM Connector: 33376654
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2, 9.5 MCON Series (BK)

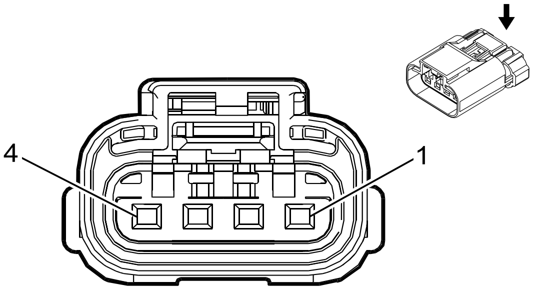
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-22 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### G10B Cooling Fan Motor - Lower (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 5 | RD/VT | 842 | Battery Positive Voltage | II | — |
| 2 | 5 | BK | 4450 | Ground | II | — |
| 3 | 0.5 | BN/YE | 473 | High Speed Cooling Fan Relay Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# G10L Cooling Fan Motor - Left



4732789

## Connector Part Information

Harness Type: Engine
OEM Connector: 33234243
Service Connector: 19367553
Description: 4-Way F 2.8 APEX Series, Sealed (BK)

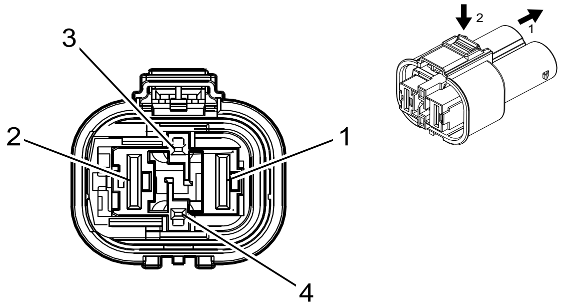
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## G10L Cooling Fan Motor - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 5 | BK | 4450 | Ground | II | — |
| 2 | 5 | RD/WH | 342 | Battery Positive Voltage | II | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | BN/YE | 473 | High Speed Cooling Fan Relay Control | I | — |

# G10R Cooling Fan Motor - Right (LM2)



4847569

## Connector Part Information

Harness Type: Engine
OEM Connector: 33376654
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2, 9.5 MCON Series (BK)

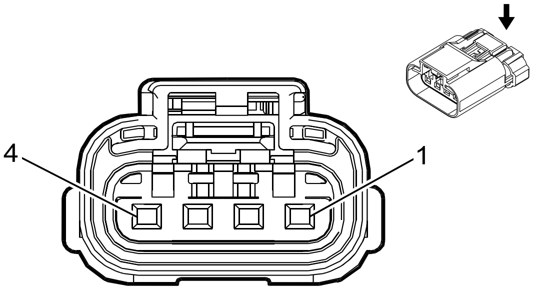
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-22 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## G10R Cooling Fan Motor - Right (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 8 | RD | 642 | Battery Positive Voltage | II | — |
| 2 | 8 | BK | 4450 | Ground | II | — |
| 3 | 0.5 | BN/YE | 473 | High Speed Cooling Fan Relay Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

## G10R Cooling Fan Motor - Right (-LM2)



4732789

### Connector Part Information

Harness Type: Engine
OEM Connector: 33234243
Service Connector: 19367553
Description: 4-Way F 2.8 APEX Series, Sealed (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### G10R Cooling Fan Motor - Right (-LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 5 | BK | 4450 | Ground | II | — |
| 2 | 5 | RD/GY | 642 | Battery Positive Voltage | II | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | BN/YE | 473 | High Speed Cooling Fan Relay Control | I | — |

## G13 Generator X2

—

### Connector Part Information

Harness Type: Generator
OEM Connector: 84238913
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

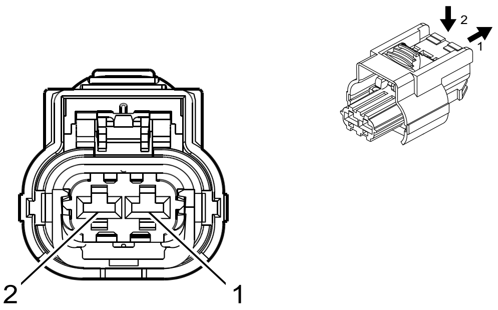
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### G13 Generator X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | — | RD/YE | 2 | Battery Positive Voltage | I | — |

## G13 Generator X1 (L3B)



4992524

### Connector Part Information

Harness Type: Engine
OEM Connector: 35050650
Service Connector: 19371194
Description: 2-Way F 2.8 CTS Series, Sealed (BK)

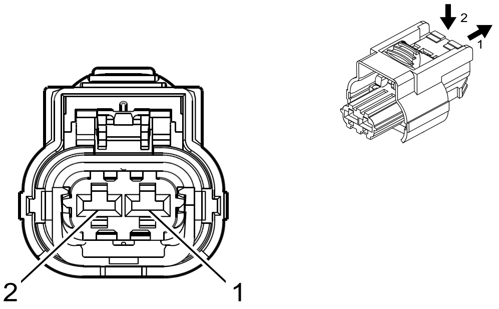
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### G13 Generator X1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 25 | Charge Indicator Control | I | — |
|  | 0.5 | BN | 25 | Charge Indicator Control |  | VYU |
| 2 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | I | — |
|  | 0.5 | GY | 23 | Generator Field Duty Cycle Signal |  | VYU |

# G13 Generator X1 (L82/LM2)



4992524

## Connector Part Information

Harness Type: Engine
OEM Connector: 35050650
Service Connector: 19371194
Description: 2-Way F 2.8 CTS Series, Sealed (BK)

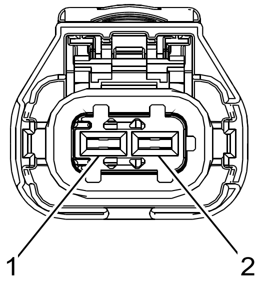
## Terminal Part Information

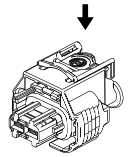
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## G13 Generator X1 (L82/LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | I | — |
|  | 0.5 | GY | 23 | Generator Field Duty Cycle Signal |  | VYU |
| 2 | 0.5 | BN | 25 | Charge Indicator Control | I | — |
|  | 0.5 | BN | 25 | Charge Indicator Control |  | VYU |

# G13 Generator X1 (L84/L87)





2577394

## Connector Part Information

Harness Type: Engine
OEM Connector: Not Available
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

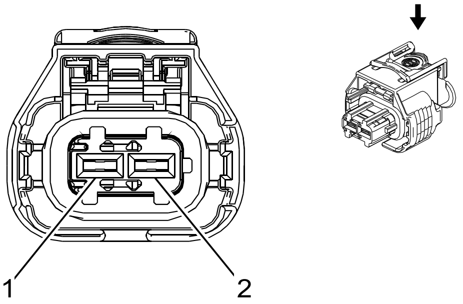
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## G13 Generator X1 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 25 | Charge Indicator Control | I | — |
|  | 0.5 | BN | 25 | Charge Indicator Control |  | VYU |
| 2 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | I | — |
|  | 0.5 | GY | 23 | Generator Field Duty Cycle Signal |  | VYU |

# G13 Generator X1 (LV3)



2577394

## Connector Part Information

Harness Type: Engine
OEM Connector: Not Available
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

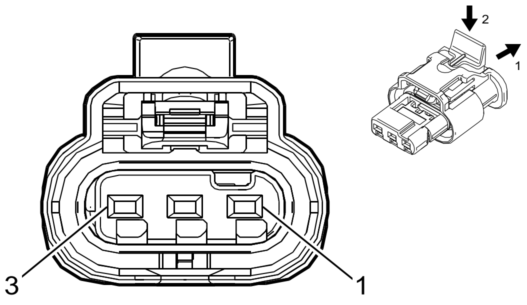
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## G13 Generator X1 (LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5<br>0.5 | GY<br>GY | 23<br>23 | Generator Field Duty Cycle Signal<br>Generator Field Duty Cycle Signal | I | —<br>VYU |
| 2 | 0.5<br>0.5 | BN<br>BN | 25<br>25 | Charge Indicator Control<br>Charge Indicator Control | I | —<br>VYU |

## G17 Heater Coolant Pump (L84/L87/LM2)



4249125

### Connector Part Information

Harness Type: Engine
OEM Connector: 33176362
Service Connector: 19352065
Description: 3-Way F 1.2 MCP Series, Sealed (BK)

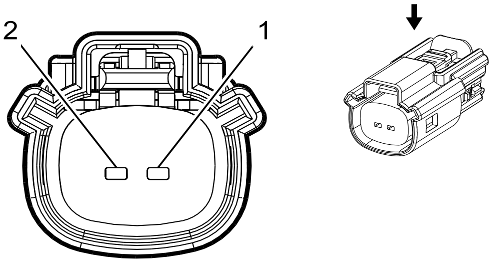
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### G17 Heater Coolant Pump (L84/L87/LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 4450 | Ground | I | L84/L87 |
| | 0.5 | BK | 4450 | Ground | I | LM2 |
| 2 | 0.5 | YE/BU | 5126 | After Boil Heater Pump Control | I | — |
| 3 | 0.5 | GN/BN | 2732 | Local Interconnect Network Bus 32 | I | — |

# G18 High Pressure Fuel Pump (L3B)



2474713

## Connector Part Information

Harness Type: Engine
OEM Connector: 13782480
Service Connector: 13577534
Description: 2-Way F 150 MX Series, Sealed (BK)

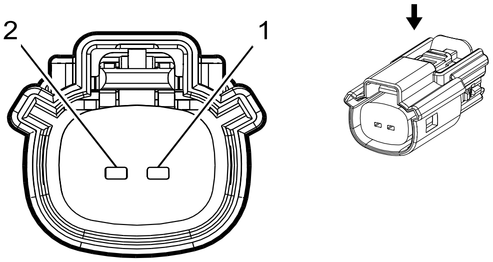
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## G18 High Pressure Fuel Pump (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | VT/BK | 7300 | High Pressure Fuel Pump Actuator Low - Control | I | — |
| 2 | 0.75 | YE | 7301 | High Pressure Fuel Pump Actuator High - Control | I | — |

# G18 High Pressure Fuel Pump (L82/L84/L87/LV3)



2474713

## Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13583151
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series, Sealed (BK)

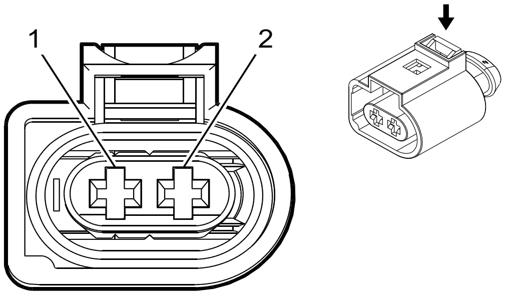
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## G18 High Pressure Fuel Pump (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | VT/BK | 7300 | High Pressure Fuel Pump Actuator Low - Control | I | — |
| 2 | 0.75 | YE | 7301 | High Pressure Fuel Pump Actuator High - Control | I | — |

## G24 Windshield Washer Pump



2474738

### Connector Part Information

Harness Type: Body
OEM Connector: 10863916
Service Connector: 19368727
Description: 2-Way F 2.8 MDK5 Series, Sealed (BK)

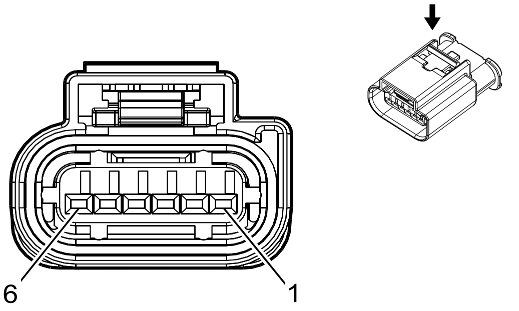
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### G24 Windshield Washer Pump

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/VT | 228 | Windshield Washer Pump Control | I | — |
| 2 | 0.75 | BK | 150 | Ground | I | — |

# G58 Evaporative Emission Purge Pump (L3B)



3747579

## Connector Part Information

Harness Type: Engine
OEM Connector: 33225994
Service Connector: 19354437
Description: 6-Way F 1.2 MCON Series, Sealed (BK)

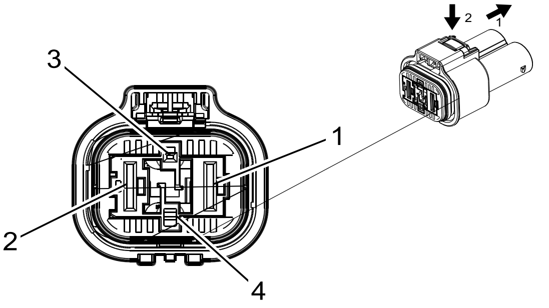
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## G58 Evaporative Emission Purge Pump (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/BU | 2447 | Evaporative Purge Pump Pressure Signal | I | — |
| 2 | 0.75 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 3 | 0.75 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 4 | 0.5 | GN/BN | 2732 | Local Interconnect Network Bus 32 | I | — |
| 5 | 0.5 | BK | 4450 | Ground | I | — |
| 6 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |

# G59 Engine Coolant Pump (L3B)



4994735

## Connector Part Information

Harness Type: Engine

OEM Connector: 33368755

Service Connector: Service by Harness - See Part Catalog

Description: 4-Way F 1.2, 9.5 MCON Series, Sealed (BK)

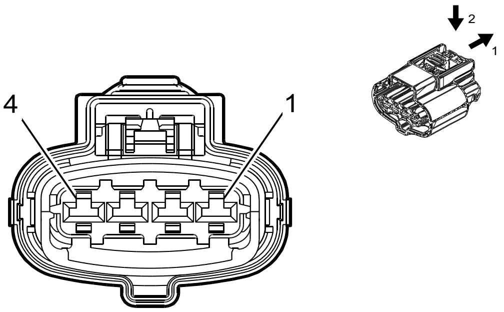
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-22 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## G59 Engine Coolant Pump (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 10 | RD/BN | 440 | Battery Positive Voltage | II | — |
| 2 | 10 | BK | 4450 | Ground | II | — |
| 3 | 0.5 | GN/BN | 2732 | Local Interconnect Network Bus 32 | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# G59 Engine Coolant Pump (LM2)



4997613

## Connector Part Information

Harness Type: Engine
OEM Connector: 33230781
Service Connector: 19371209
Description: 4-Way F 2.8 CTS Series, Sealed (BK)

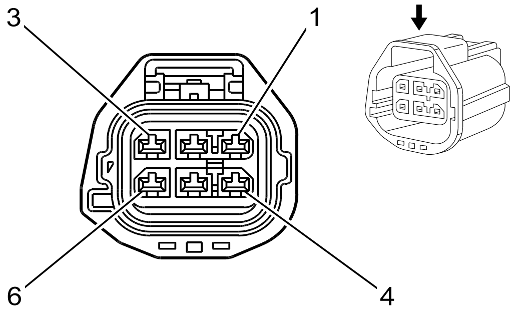
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## G59 Engine Coolant Pump (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 550 | Ground | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | GN/BN | 2732 | Local Interconnect Network Bus 32 | I | — |
| 4 | 1 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | I | — |

# K4 Assist Step Control Module X1 (BRS)



1420587

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33334914
Service Connector: 19368855
Description: 6-Way F 2.8 Series, Sealed (GY)

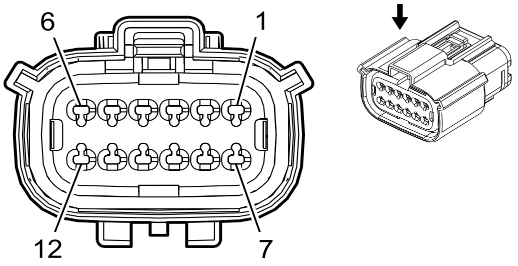
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K4 Assist Step Control Module X1 (BRS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2 | GN | 7469 | Articulating Running Boards Motor Right Control Retract | I | — |
| 2 | 2.5 | BK | 2150 | Ground | I | — |
| 3 | 2 | WH/BN | 7471 | Articulating Running Boards Motor Left Control Extend | I | — |
| 4 | 2 | BU | 7470 | Articulating Running Boards Motor Right Control Extend | I | — |
| 5 | 2.5 | RD/YE | 1142 | Battery Positive Voltage | I | — |
| 6 | 2 | GY | 7472 | Articulating Running Boards Motor Left Control Retract | I | — |

# K4 Assist Step Control Module X2 (BRS)



2424960

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33297566
Service Connector: 19352907
Description: 12-Way F 150 MX Series, Sealed (BK)

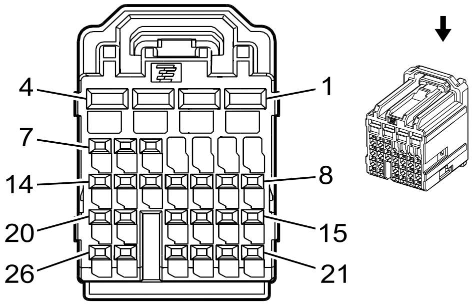
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300625 | J-35616-2A (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |

## K4 Assist Step Control Module X2 (BRS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/RD | 7468 | Running Boards Motor Hall Sensor Left 5V Reference | I | — |
| 2 | 0.5 | GN/RD | 7464 | Running Boards Motor Hall Sensor Right 5V Reference | I | — |
| 3 | 0.5 | YE | 7467 | Running Boards Motor Hall Sensor Left Signal | I | — |
| 4 | 0.5 | VT | 7465 | Running Boards Motor Hall Sensor Right Signal | I | — |
| 5 | 0.5 | YE/BN | 7466 | Running Boards Motor Hall Sensor Left Low Reference | I | — |
| 6 | 0.5 | YE/BK | 7463 | Running Boards Motor Hall Sensor Right Low Reference | I | — |
| 7 | 0.5 | BK/BU | 685 | Articulating Running Board Kick Switch Return | I | — |
| 8 | 0.5 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.5 | BN/WH | 7462 | Running Boards Disable Signal | I | — |
| 11 | 0.5 | BU/GN | 4746 | Articulating Running Board Left Kick Switch Signal | I | — |
| 12 | 0.5 | WH | 4747 | Articulating Running Board Right Kick Switch Signal | I | — |

## K9 Body Control Module X1



2537268

### Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13824335
Service Connector: 13576031
Description: 26-Way F 0.64, 2.8 Series (NA)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575578 | J-35616-35 (VT) | J-38125-553 | 8100-4445 | Sumitomo 22 | F | D |
| II | 13582297 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 13582326 | J-35616-35 (VT) | J-38125-553 | 8100-4444 | Sumitomo 22 | 2 | A |
| IV | 19366999 | J-35616-35 (VT) | J-38125-553 | 8100-4443 | Sumitomo 22 | E | A |

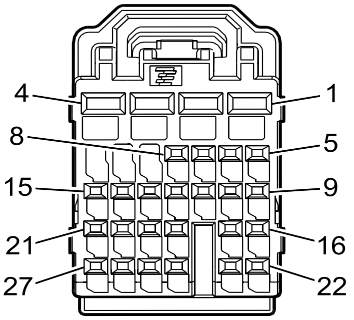
### K9 Body Control Module X1

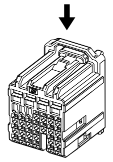
| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1850 | Ground | I | — |
| 2 | 1 | RD/BU | 2540 | Battery Positive Voltage | III | — |
| 3 | 0.5 | RD/GY | 2140 | Battery Positive Voltage | IV | — |
| 4 | 0.75 | RD/BN | 2240 | Battery Positive Voltage | III | — |
| 5 | 0.5 | WH | 6816 | Indicator Dimming Control | II | — |
| 6 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | BN/BK | 5720 | Ignition Mode Switch Accessory LED Signal | II | — |
| 9 | 0.35 | WH/BN | 7555 | Lighting Control Switch Signal | II | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | GN/BN | 306 | Headlamp Switch Headlamps Off Signal Control | II | — |
| 12 | 0.35 | BU | 1111 | Auto Stop Start Switch Signal | II | — |
| 13 | 0.35 | YE | 7556 | Lighting Control Switch Reference | II | — |
| 14 | 0.35 | GY/GN | 328 | Interior Lamp Defeat Switch Signal | II | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.35 | WH/VT | 103 | Headlamp Switch On Signal | II | — |
| 17 | — | — | — | Not Occupied | — | — |

## K9 Body Control Module X1 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 18 | 0.35 | BU/VT | 5904 | Steering Column Lock Status Signal | II | — |
| 19 | 0.35 | BK/BN | 5360 | Brake Apply Sensor Low Reference | II | — |
| 20 | 0.35 | BU/BK | 5719 | Ignition Mode Switch Start LED Signal | II | — |
| 21 | 0.35 | GY | 728 | Security Indicator Control | II | — |
| 22 | 0.35 | GN/GY | 13 | Headlamp Switch Park Lamp Signal | II | — |
| 23 | 0.35 | GY | 157 | Interior Lamp Control | II | — |
| 24 | 0.35 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | II | — |
| 25 | 0.35 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | — |
| 26 | 0.35 | BU/WH | 3275 | Remote Function Actuator Receive Signal | II | — |

# K9 Body Control Module X2





2537269

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13824336
Service Connector: 13576032
Description: 27-Way F 0.64, 2.8 Series (BU)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575578 | J-35616-35 (VT) | J-38125-553 | 8100-4445 | Sumitomo 22 | F | D |
| II | 13582297 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19366999 | J-35616-35 (VT) | J-38125-553 | 8100-4443 | Sumitomo 22 | E | A |

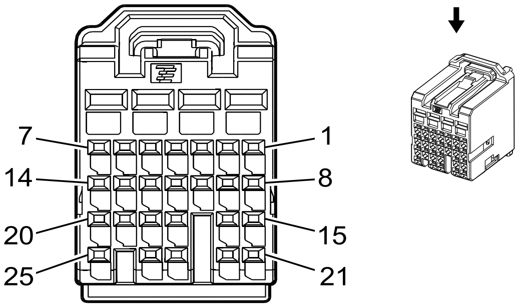
## K9 Body Control Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD/WH | 2740 | Battery Positive Voltage | III | — |
| 2 | 2.5 | BK | 1850 | Ground | I | — |
| 3 | 0.5 | RD/BN | 2940 | Battery Positive Voltage | III | — |
| 4 | 2.5 | RD/VT | 4040 | Battery Positive Voltage | I | — |
| 5 | 0.35 | VT/GN | 7558 | LED Ambient Lighting Control 2 | II | — |
| 6 | 0.35 | BU | 1110 | Auto Stop Start Indicator Control | II | — |
| 7 | 0.35 | BU/YE | 5361 | Brake Apply Sensor Signal | II | — |
| 8 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.35 | WH/BU | 278 | Ambient Light Sensor Signal | II | — |
| 11 | 0.35 | YE/BU | 7295 | Left Minor Endgate Ajar Signal | II | — |
| 12 | 0.35 | WH/BN | 7296 | Right Minor Endgate Ajar Signal | II | — |
| 13 | 0.35 | WH | 5359 | Brake Apply Sensor Control | II | — |
| 14 | 0.35 | BU/VT | 1788 | Traction Control Switch Signal 1 | II | — |
| 15 | 0.35<br>0.35 | GY/WH<br>GY/WH | 4630<br>7176 | AC Power Outlet Switch Signal<br>All Windows Open Switch Signal | II<br>II | KC9/KCA<br>-KC9-KCA-KI4-KI5 |
| 16 | 0.35 | GY | 3273 | Remote Function Actuator Low Reference | II | — |
| 17 | 0.35 | BU/GN | 5723 | Ignition Mode Switch Mode Voltage | II | — |

## K9 Body Control Module X2 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 18 | 0.35 | GY | 158 | Cargo Lamp Switch Signal | II | — |
| 19 | 0.35 | WH/GY | 2935 | Task Lamp Switch Signal | II | — |
| 20 | 0.5 | WH/BU | 3691 | Trailer Brake Apply Signal | II | — |
| 21 | 0.5 | GN/GY | 6135 | Local Interconnect Network Serial Data Bus 4 | II | — |
| 22 | 0.35 | GN | 5060 | Low Speed GMLAN Serial Data | II | — |
| 23 - 24 | — | — | — | Not Occupied | — | — |
| 25 | 0.35 | GY/WH | 3272 | Remote Function Actuator Control | II | — |
| 26 | 0.35 | GN/WH | 111 | Hazard Switch Signal | II | — |
| 27 | 0.35 | YE/GN | 3274 | Remote Function Actuator Transmit Signal | II | — |

## K9 Body Control Module X3



2537274

### Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13824337
Service Connector: 13576037
Description: 25-Way F 0.64, 2.8 Series (GN)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13582297 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

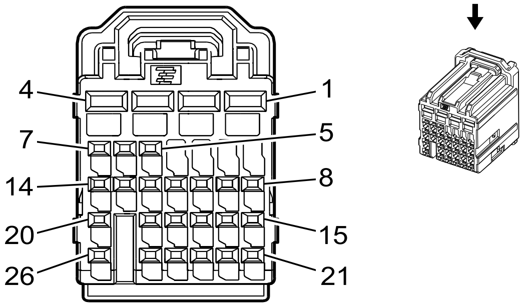
### K9 Body Control Module X3

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35<br>0.5 | GN/GY<br>GN/GY | 3277<br>3277 | Vehicle Anti-Theft System Immobilizer Low Reference<br>Vehicle Anti-Theft System Immobilizer Low Reference | I<br>I | BTM<br>-BTM |
| 2 | 0.35<br>0.5 | GN/VT<br>GN/VT | 7533<br>7533 | Local Interconnect Network Serial Data Bus 11<br>Local Interconnect Network Serial Data Bus 11 | I<br>I | BTM<br>-BTM |
| 3 | 0.35<br>0.5 | GY/BK<br>GY/BK | 3276<br>3276 | Vehicle Anti-Theft System Immobilizer Control<br>Vehicle Anti-Theft System Immobilizer Control | I<br>I | BTM<br>-BTM |
| 4 | 0.35 | WH/RD | 1444 | 12V Reference | I | — |
| 5 | 0.35 | VT/YE | 4 | Accessory Ignition Voltage | I | — |
| 6 | 0.35 | VT/BK | 3 | Run/Crank Ignition 1 Voltage | I | — |
| 7 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.35 | BN/GN | 1884 | Cruise Control Set/Coast/Resume/Accelerate Switch Signal | I | — |
| 10 | 0.5 | BK/GY | 6009 | Windshield Wiper Switch Low Reference | I | — |
| 11 | 0.5 | WH | 524 | Headlamp Dimmer Switch High Beam Signal | I | — |
| 12 | 0.5 | WH/GN | 663 | Hazard Switch Left Turn Signal | I | — |
| 13 | 0.5 | YE/BU | 1714 | Windshield Wiper Switch Low Signal | I | — |
| 14 | 0.5 | WH/GY | 3849 | High Beam Auto On/Off Switch Signal | I | — |
| 15 | 0.35 | WH/VT | 1020 | Off/Run/Crank Ignition Voltage | I | — |
| 16 | 0.35 | GY/GN | 5737 | Adaptive Cruise Control Gap Up/Down Switch Signal | I | — |
| 17 | 0.5 | YE/BN | 307 | Headlamp Switch Flash To Pass Signal | I | — |

## K9 Body Control Module X3 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 18 | 0.35 | GN/WH | 3287 | Horn Switch Signal | I | — |
| 19 | 0.35 | GN/WH | 4115 | Local Interconnect Network Serial Data Bus 15 | I | — |
| 20 | 0.5 | GY | 1715 | Windshield Wiper Switch High Signal | I | — |
| 21 | 0.5 | VT/YE | 5526 | Tap Up/Tap Down Switch Signal | I | — |
| 22 | 0.35 | WH/BK | 1073 | Ignition Key Resistor Signal | I | — |
| 23 | 0.35 | GN | 4512 | Wireless Charging System Charge Indicator Control | I | — |
| 24 | 0.5 | VT/BU | 664 | Hazard Switch Right Turn Signal | I | — |
| 25 | 0.35 | WH/BK | 94 | Windshield Washer Switch Signal | I | — |

# K9 Body Control Module X4



2537270

## Connector Part Information

Harness Type: Body
OEM Connector: 13826914
Service Connector: 13576033
Description: 26-Way F 0.64, 2.8 Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13582297 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 13582298 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 13582326 | J-35616-35 (VT) | J-38125-553 | 8100-4444 | Sumitomo 22 | 2 | A |
| IV | 19366999 | J-35616-35 (VT) | J-38125-553 | 8100-4443 | Sumitomo 22 | E | A |

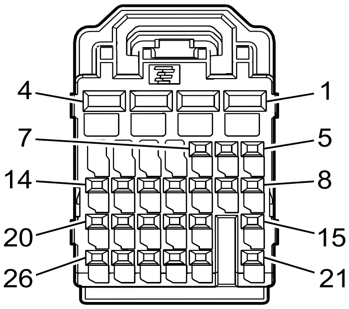
## K9 Body Control Module X4

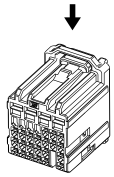
| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | YE | 712 | Left Headlamp Low Beam Control | III | — |
| 2 | 1 | YE | 312 | Right Headlamp Low Beam Control | III | — |
| 3 | 0.5 | GN/VT | 1315 | Right Front Turn Signal Lamp Control | IV | — |
| 4 | 1 | BN/GN | 19 | Right Rear Stop/Turn Lamp Control | III | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35 | GY/BU | 7538 | Left Front DRL Control | I | — |
| 8 | 0.35 | VT/GY | 1630 | Steering Column Key Cylinder Lock Solenoid Control | I | -BTM |
| 9 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | VT/WH | 5065 | Stop Lamp Relay Coil Control | I | — |
| 12 | 0.35 | GY/VT | 755 | RAP Relay Coil Control | I | — |
| 13 | 0.35 | GN/YE | 6846 | Rear License Lamp Control | I | — |
| 14 | 0.35 | BN/GY | 2268 | Windshield Washer Relay Control | I | — |
| 15 | 0.35 | GN/VT | 5199 | Run/Crank Relay Coil Control | I | — |
| 16 | 0.35 | GY | 91 | Windshield Wiper Motor Relay Coil Control | I | — |
| 17 | 0.35 | BN/GN | 196 | Windshield Wiper Motor Park Switch Signal | I | — |

## K9 Body Control Module X4 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 18 | 0.35<br>0.35 | WH/YE<br>GN/BU | 5075<br>761 | Current Sensor Signal<br>Blower Speed Feedback Signal | I<br>I | -KL9<br>L3B/LM2 |
| 19 | 0.35<br>0.35 | BU/YE<br>BU/YE | 6844<br>7176 | ABS/TCS Hill Descent Control Switch Signal<br>All Windows Open Switch Signal | I<br>I | JHD<br>-JHD |
| 20 | 0.75 | RD/YE | 2340 | Battery Positive Voltage | II | — |
| 21 | 0.35 | BU/VT | 5076 | Current Sensor Control | I | -KL9 |
| 22 | 0.35 | VT/YE | 5985 | Accessory Wakeup Serial Data | I | — |
| 23 | 0.35 | WH/BU | 5986 | Serial Data Communication Enable | I | — |
| 24 | 0.35 | BN/GN | 4064 | Hood Status B Signal | I | — |
| 25 | 0.35 | YE/BU | 4086 | Pushbutton Start Challenge Active Signal | I | BTM |
| 26 | 0.75 | BK/WH | 2351 | Signal Ground | II | — |

# K9 Body Control Module X5





2537271

## Connector Part Information

Harness Type: Body
OEM Connector: 13826916
Service Connector: 13576034
Description: 26-Way F 0.64, 2.8 Series (BN)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13582297 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 13582326 | J-35616-35 (VT) | J-38125-553 | 8100-4444 | Sumitomo 22 | 2 | A |
| III | 19366999 | J-35616-35 (VT) | J-38125-553 | 8100-4443 | Sumitomo 22 | E | A |

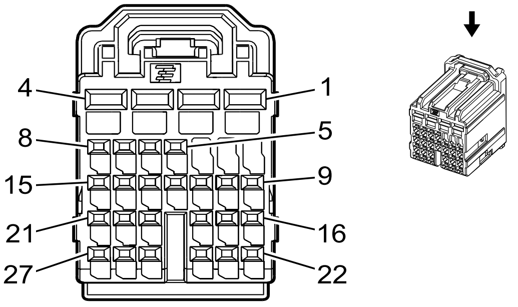
## K9 Body Control Module X5

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | YE/BU | 18 | Left Rear Stop/Turn Lamp Control | II | — |
| 2 | 0.5 | BU/WH | 1314 | Left Front Turn Signal Lamp Control | III | — |
| 3 | 0.5 | RD/GN | 5140 | Battery Positive Voltage | III | — |
| 4 | 0.5 | RD/WH | 3440 | Battery Positive Voltage | III | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | BK/VT | 5077 | Current Sensor Low Reference | I | — |
| 7 | 0.35 | BU/BN | 7539 | Right Front DRL Control | I | — |
| 8 | 0.5 | BU/WH | 5186 | Left Trailer Turn Signal Lamp Control | I | — |
| 9 | 0.35 | BU/VT | 7729 | Major Endgate Low Relay Control | I | — |
| 10 | 0.5 | BN/WH | 1317 | Fog Lamp Relay Control | I | — |
| 11 | 0.35 | WH/GN | 7728 | Major Endgate High Relay Control | I | — |
| 12 | 0.35 | WH/BU | 6311 | Cruise/ETC/TCC Brake Signal | I | — |
| 13 | 0.35 | YE | 6812 | Out of Park Signal | I | — |
| 14 | 0.35 | VT/BN | 300 | Run Ignition 3 Voltage | I | — |
| 15 | 0.35 | BU/GY | 4672 | Dome Lamp Off Indicator Control | I | — |
| 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.5 | YE/GY | 5187 | Right Trailer Turn Signal Lamp Control | I | — |

## K9 Body Control Module X5 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 18 | 0.35 | BN/VT | 1969 | Headlamp High Beam Relay Control | I | — |
| 19 | 0.35 | BN/WH | 28 | Horn Relay Control | I | — |
| 20 | 0.35 | YE | 7755 | AC Power Outlet Status Indicator Control | I | — |
| 21 | 0.5 | YE/BN | 2229 | Left Headlamp Relay Control | I | — |
| 22 | 0.35 | BU | 45 | Park Lamp Relay Control | I | — |
| 23 | — | — | — | Not Occupied | — | — |
| 24 | 0.35 | WH/VT | 860 | Front Windshield Wiper Switch High Signal | I | — |
| 25 | 0.35 | BN | 7754 | AC Power Outlet Enable | I | — |
| 26 | 0.35 | BU/BN | 38 | Backup Lamp Relay Control | I | — |

# K9 Body Control Module X6



2537272

## Connector Part Information

Harness Type: Body
OEM Connector: 13826917
Service Connector: 13576035
Description: 27-Way F 0.64, 2.8 Series (PK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575578 | J-35616-35 (VT) | J-38125-553 | Not Available | Not Available | Not Available | Not Available |
| II | 13582297 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 13582326 | J-35616-35 (VT) | J-38125-553 | 8100-4444 | Sumitomo 22 | 2 | A |

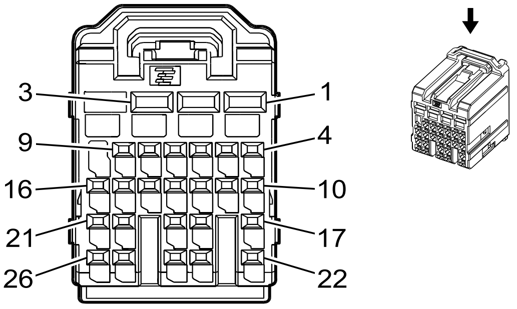
## K9 Body Control Module X6

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GY | 5911 | Door Lock Actuator Lock Control 2 | III | — |
| 2 | 0.75 | GY | 295 | Door Lock Actuator Lock Control | III | — |
| 3 | 1.5 | BK | 1150 | Ground | I | — |
| 4 | 0.75 | BN/YE | 294 | Door Lock Actuator Unlock Control | III | — |
| 5 | 0.35 | BN | 7291 | Major Endgate Release Switch Signal Interior | II | — |
| 6 | 0.35 | BU/VT | 1124 | Door Lock Key Switch Unlock Signal | II | — |
| 7 | 0.35 | WH/GY | 7297 | Minor Endgate High Relay Control | II | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.35 | GN/BU | 6133 | Local Interconnect Network Serial Data Bus 2 | II | — |
| 10 | 0.5 | GN/YE | 6134 | Local Interconnect Network Serial Data Bus 3 | II | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.35 | YE/BK | 5356 | Left Tail Lamp Outage Detection Signal | II | — |
| 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.35 | GY | 7292 | Major Endgate Release Switch Signal Exterior | II | — |
| 15 | 0.35 | YE | 7294 | Minor Endgate Release Switch Discrete Signal Exterior | II | — |
| 16 | 0.5 | GN/BN | 6132 | Local Interconnect Network Serial Data Bus 1 | II | — |
| 17 - 20 | — | — | — | Not Occupied | — | — |

## K9 Body Control Module X6 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 21 | 0.35 | WH/VT | 6821 | Surveillance Switch Signal | II | — |
| 22 | 0.35 | VT/YE | 5357 | Right Tail Lamp Outage Detection Signal | II | — |
| 23 | — | — | — | Not Occupied | — | — |
| 24 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | — |
| 25 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | II | — |
| 26 | 0.35 | BN/WH | 1429 | Standing Lamp Relay Control | II | — |
| 27 | 0.35 | BN/WH | 781 | Driver Door Lock Switch Unlock Signal | II | — |

# K9 Body Control Module X7



2537273

## Connector Part Information

Harness Type: Body
OEM Connector: 13826915
Service Connector: 13576036
Description: 26-Way F 0.64, 2.8 Series (GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13582297 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19366999 | J-35616-35 (VT) | J-38125-553 | 8100-4443 | Sumitomo 22 | E | A |

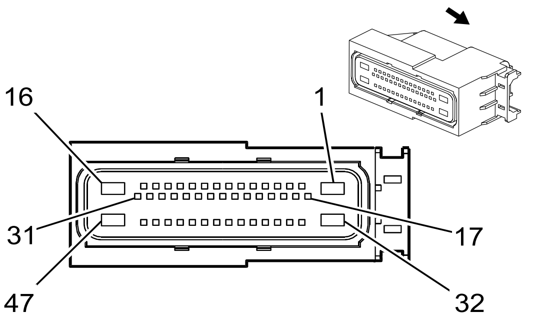
## K9 Body Control Module X7

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | WH/BN | 6815 | Inadvertent Power Control | II | — |
| 4 | 0.5 | GY/BU | 7762 | Cargo Bed Lamp Control | I | — |
| 5 | 0.35 | BU | 2082 | Puddle Lamp Control | I | — |
| 6 | 0.35 | YE/WH | 816 | Brake Transmission Shift Interlock Solenoid Control | I | — |
| 7 | 0.35 | GY/BU | 7298 | Minor Endgate Low Relay Control | I | — |
| 8 | 0.35 | GY/GN | 5996 | Driver Outside Rear View Mirror Puddle Lamp Control | I | — |
| 9 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | BN/YE | 780 | Driver Door Lock Switch Lock Signal | I | — |
| 12 | 0.35 | BN | 4511 | Wireless Charging System Fault Indicator Control | I | — |
| 13 | 0.35 | GN/WH | 1932 | Shift Select Switch Park Signal | I | — |
| 14 | 0.35<br>0.35 | WH/BU<br>GY | 3203<br>746 | Right Headlamp Bulb Outage Signal<br>Right Front Door Ajar Switch Signal | I<br>I | (AXG/-A6R)<br>A6R |
| 15 | 0.35 | BU/GY | 553 | Shift Select Switch Performance Signal | I | — |
| 16 | 0.5 | WH/BU | 3691 | Trailer Brake Apply Signal | I | — |
| 17 | 0.35 | BU | 2082 | Puddle Lamp Control | I | — |

## K9 Body Control Module X7 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.35 | GY | 156 | Courtesy Lamp Switch Signal | I | — |
| 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.35 | YE/VT | 244 | Passenger Door Lock Switch Lock Control | I | — |
| 22 | 0.35 | WH/YE | 7557 | LED Ambient Lighting Control 1 | I | — |
| 23 | — | — | — | Not Occupied | — | — |
| 24 | 0.35 | BN/VT | 245 | Passenger Door Lock Switch Unlock Control | I | — |
| 25 | 0.35<br>0.35 | GY<br>BU/VT | 745<br>3204 | Left Front Door Ajar Switch Signal<br>Left Headlamp Bulb Outage Signal | I<br>I | A6Q<br>AXG/-A6Q |
| 26 | — | — | — | Not Occupied | — | — |

## K19 Suspension Control Module (Z45)



1858233

### Connector Part Information

Harness Type: Chassis
OEM Connector: 15491306
Service Connector: 19168025
Description: 47-Way F 0.64, 6.3 Series, Sealed (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13578883 | J-35616-64B (LT BU) | J-38125-215A | SAITS-A03T-M064 | Yazaki 14 | 9 | 9 |
| II | 13580835 | J-35616-42 (RD) | J-38125-553 | Not Available | Not Available | Not Available | Not Available |
| III | 13581373 | J-35616-64B (LT BU) | J-38125-215A | SAITS-A03T-M064 | Yazaki 14 | 9 | 9 |

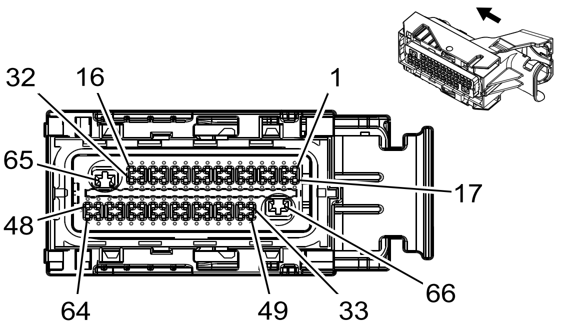
### K19 Suspension Control Module (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 1750 | Ground | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BK/BU | 1206 | Left Front Strut Position Sensor Low Reference | I | — |
| 4 | 0.5 | BK/GY | 1212 | Right Front Strut Position Sensor Low Reference | I | — |
| 5 | 0.5 | BK/GN | 1209 | Left Rear Strut Position Sensor Low Reference | I | — |
| 6 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.5 | BU/RD | 1205 | Left Front Strut Position Sensor 5V Reference | I | — |
| 11 | 0.5 | BN/RD | 1211 | Right Front Strut Position Sensor 5V Reference | I | — |
| 12 | 0.5 | YE/RD | 1208 | Left Rear Strut Position Sensor 5V Reference | I | — |
| 13 - 15 | — | — | — | Not Occupied | — | — |
| 16 | 1 | YE/WH | 1213 | Right Front Strut Position Sensor Signal | II | — |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.5 | WH | 6106 | High Speed GMLAN Serial Data (-) 2 | I | — |
| 19 | 0.5 | WH | 6106 | High Speed GMLAN Serial Data (-) 2 | I | — |
| 20 | 0.5 | BU/YE | 6105 | High Speed GMLAN Serial Data (+) 2 | I | — |
| 21 | 0.5 | BU/YE | 6105 | High Speed GMLAN Serial Data (+) 2 | I | — |
| 22 - 24 | — | — | — | Not Occupied | — | — |

## K19 Suspension Control Module (Z45) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 25 | 0.5 | GN/WH | 1210 | Left Rear Strut Position Sensor Signal | I | — |
| 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | I | — |
| 28 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | I | — |
| 29 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | I | — |
| 30 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | I | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 1 | RD/GN | 2440 | Battery Positive Voltage | II | — |
| 33 | 0.75 | GN/GY | 1119 | Right Rear Damping Servo Control | III | — |
| 34 | 0.75 | BN/GN | 1118 | Right Rear Damping Servo Control | III | — |
| 35 | 0.75 | BU/GY | 1114 | Left Rear Damping Servo Control | III | — |
| 36 | 0.75 | GN/VT | 1115 | Left Rear Damping Servo Control | III | — |
| 37 - 38 | — | — | — | Not Occupied | — | — |
| 39 | 0.5 | WH/BU | 5986 | Serial Data Communication Enable | I | — |
| 40 | — | — | — | Not Occupied | — | — |
| 41 | 0.5 | BN/WH | 1207 | Left Front Strut Position Sensor Signal | I | — |
| 42 | — | — | — | Not Occupied | — | — |
| 43 | 0.75 | GY/BU | 1113 | Left Front Damping Servo Control | III | — |
| 44 | 0.75 | BN/WH | 1107 | Left Front Damping Servo Control | III | — |
| 45 | 0.75 | BN/BU | 1116 | Right Front Damping Servo Control | III | — |
| 46 | 0.75 | GY/WH | 1117 | Right Front Damping Servo Control | III | — |
| 47 | — | — | — | Not Occupied | — | — |

## K20 Engine Control Module X1 (L3B)



4504420

### Connector Part Information

Harness Type: Engine
OEM Connector: 33303655
Service Connector: 19371186
Description: 66-Way F 0.64, 2.8 Series, Sealed (BK with BU Terminal Position Assurance)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13579770 | J-35616-4A (PU) | J-38125-11A | 7116-4152-02 | Yazaki 9 | 2 | 5 |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19355819 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

### K20 Engine Control Module X1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | II | — |
| 2 | 0.5 | YE/BK | 625 | Starter Enable Relay Control | II | — |
| 3 | 0.5 | YE/VT | 4325 | Starter Pinion Solenoid Relay Control | II | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | VT/GY | 3615 | Step Cam A Control | II | — |
| 7 | 0.5 | GN/BK | 3616 | Step Cam B Control | II | — |
| 8 | 0.5 | BU | 3584 | Camshaft Stepper A Control | II | — |
| 9 | 0.5 | GN | 3585 | Camshaft Stepper B Control | II | — |
| 10 | 0.5 | YE/BU | 3587 | Camshaft Stepper D Control | II | — |
| 11 | 0.5 | GY | 3586 | Camshaft Stepper C Control | II | — |
| 12 | 0.5 | BU/WH | 3589 | Camshaft Stepper Position Sensor 1 Signal | II | — |
| 13 | 0.5 | GN/WH | 3592 | Camshaft Stepper Position Sensor 2 Signal | II | — |
| 14 | 0.5 | WH | 924 | Camshaft Stepper Position Sensor #3 Signal | II | — |
| 15 | 0.5 | WH/BU | 6311 | Cruise/ETC/TCC Brake Signal | II | — |
| 16 | 0.5 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | II | — |
| 17 | 0.75 | GN/GY | 465 | Fuel Pump Primary Relay Control | II | — |
| 18 | 0.5 | WH/GY | 459 | A/C Compressor Clutch Relay Control | II | — |

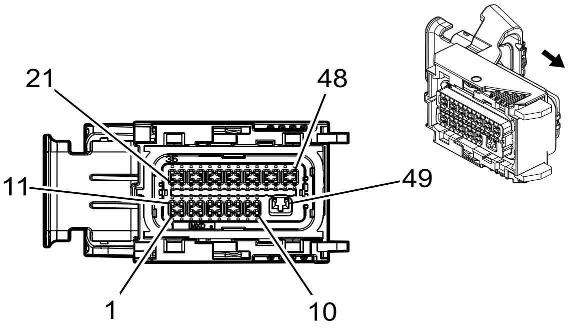
## K20 Engine Control Module X1 (L3B) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 19 | 0.5 | BN/WH | 419 | Check Engine Indicator Control | II | — |
| 20 | 0.5 | BN/BU | 4065 | Powertrain Mount Solenoid Control 1 | III | — |
| 21 | 0.5 | BN/YE | 473 | High Speed Cooling Fan Relay Control | II | — |
| 22 | 0.5 | BN/GN | 927 | Step Cam A Control | II | — |
| 23 | 0.5 | BU | 926 | Step Cam B Control | II | — |
| 24 | 0.5 | YE/VT | 6265 | Camshaft CAM W Signal | II | — |
| 25 | 0.5 | VT/BK | 6264 | Camshaft CAM X Signal | II | — |
| 26 | 0.5 | GY/BN | 6262 | Camshaft CAM Z Signal | II | — |
| 27 | 0.5 | GN/BN | 6261 | Camshaft CAM Z Control | II | — |
| 28 | 0.5 | BU/BK | 928 | Camshaft Stepper Position Sensor #4 Signal | II | — |
| 29 | 0.5 | BU | 932 | Camshaft Stepper Position Sensor Signal | II | — |
| 30 | 0.5 | GY/BN | 933 | Camshaft Stepper Position Sensor Signal | II | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.5 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| 33 | 0.5 | BK/BU | 1271 | Accelerator Pedal Position Low Reference 1 | II | — |
| 34 | 0.5 | YE/WH | 3746 | Camshaft Exhaust Lobe Axial Position Signal (1) | II | — |
| 35 | 0.5 | BK/VT | 1272 | Accelerator Pedal Position Low Reference 2 | II | — |
| 36 | 0.5 | YE/GN | 3747 | Camshaft Exhaust Lobe Axial Position Signal (2) | II | — |
| 37 | 0.5 | YE | 4063 | Hood Status A Signal | II | — |
| 38 | — | — | — | Not Occupied | — | — |
| 39 | 0.5 | YE/WH | 1161 | Accelerator Pedal Position Signal 1 | II | — |
| 40 - 41 | — | — | — | Not Occupied | — | — |
| 42 | 0.5 | GN/BN | 2732 | Local Interconnect Network Bus 32 | II | — |
| 43 - 44 | — | — | — | Not Occupied | — | — |
| 45 | 0.5 | WH | 4499 | High Speed GMLAN Serial Data (-) 7 | II | — |
| 46 | 0.5 | BU/BN | 4498 | High Speed GMLAN Serial Data (+) 7 | II | — |
| 47 | 0.5 | GN/WH | 492 | Mass Air Flow Sensor Signal | II | — |
| 48 | 0.5 | RD/BN | 440 | Battery Positive Voltage | II | — |
| 49 | 0.5 | WH/RD | 1164 | Accelerator Pedal Position 5V Reference 1 | II | — |
| 50 | 0.5 | VT/WH | 3744 | Camshaft Intake Lobe Axial Position Signal (1) | II | — |
| 51 | 0.5 | BN/RD | 1274 | Accelerator Pedal Position 5V Reference 2 | II | — |
| 52 | 0.5 | VT/GN | 3745 | Camshaft Intake Lobe Axial Position Signal (2) | II | — |
| 53 | 0.5 | BU/GY | 636 | Outside Ambient Air Temperature Sensor Signal | II | — |
| 54 | 0.5 | BN | 4645 | Heater Core Outlet Temperature Signal | II | — |
| 55 | 0.5 | GN | 380 | A/C Refrigerant Pressure Sensor Signal | II | — |
| 56 | 0.5 | WH/GN | 5380 | Brake Position Sensor Signal | II | — |
| 57 | 0.5 | GN/WH | 1162 | Accelerator Pedal Position Signal 2 | II | — |
| 58 | — | — | — | Not Occupied | — | — |
| 59 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | II | — |
| 60 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | — |
| 61 | — | — | — | Not Occupied | — | — |
| 62 | 0.5 | VT/YE | 5985 | Accessory Wakeup Serial Data | II | — |
| 63 | 0.5 | WH | 7494 | High Speed GMLAN Serial Data (-)3 | II | — |
| 64 | 0.5 | BU/BK | 7493 | High Speed GMLAN Serial Data (+)3 | II | — |
| 65 | 2 | BK/WH | 451 | Signal Ground | I | — |

## K20 Engine Control Module X1 (L3B) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 66 | 2 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | I | — |

# K20 Engine Control Module X2 (L3B)



4596458

## Connector Part Information

Harness Type: Engine
OEM Connector: 33303656
Service Connector: 19355678
Description: 49-Way F 0.64, 2.8 Series, Sealed (BK with BK Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13579770 | J-35616-4A (PU) | J-38125-11A | 7116-4152-02 | Yazaki 9 | 2 | 5 |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

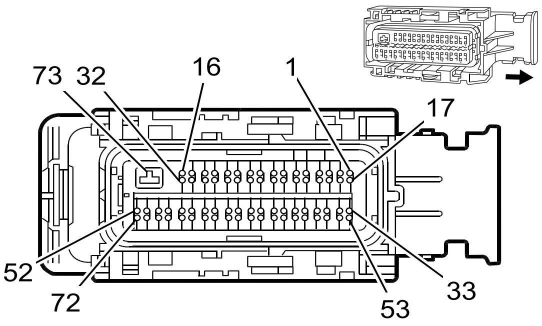
## K20 Engine Control Module X2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/GN | 4320 | Selective Catalytic Reduction Power Module Wake-Up Signal | II | — |
| 2 | 0.75 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | II | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | BN/BU | 2447 | Evaporative Purge Pump Pressure Signal | II | — |
| 6 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.75 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | II | — |
| 10 | 0.5 | BK/BU | 2978 | Coolant Diverter Valve Position Signal | II | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | II | — |
| 13 - 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.5 | YE/BN | 331 | Oil Pressure Sensor Signal | II | — |
| 17 | 0.5 | WH/VT | 4108 | Driver Mode Switch Signal | II | — |
| 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.5 | BU/WH | 2918 | Fuel Rail Pressure Sensor Signal | II | — |
| 20 | 0.5 | WH | 2590 | Turbo Charger Wastegate Motor Feedback Signal | II | — |
| 21 | — | — | — | Not Occupied | — | — |
| 22 | 0.5 | BK/GY | 626 | Engine Control Sensors Low Reference (3) | II | — |
| 23 | 0.5 | VT | 7485 | Oil Temperature Sensor Signal | II | — |

## K20 Engine Control Module X2 (L3B) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 24 | 0.5 | BN/BU | 357 | Oil Temperature Sensor Signal | II | — |
| 25 | 0.5 | YE | 2596 | Turbo Charger Inlet Absolute Pressure Sensor Signal | II | — |
| 26 - 30 | — | — | — | Not Occupied | — | — |
| 31 | 0.75 | YE/GY | 6936 | Heated Oxygen Sensor Collector Signal | II | — |
| 32 | 0.75 | BN | 6934 | Heated Oxygen Sensor Ground | II | — |
| 33 | — | — | — | Not Occupied | — | — |
| 34 | 0.75 | GY/WH | 3113 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1 | II | — |
| 35 | — | — | — | Not Occupied | — | — |
| 36 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | II | — |
| 37 | 0.5 | YE/BK | 3000 | Coolant Temperature Sensor 2 Signal | II | — |
| 38 | 0.5 | BN/GY | 4644 | Heater Core Inlet Temperature Signal | II | — |
| 39 | — | — | — | Not Occupied | — | — |
| 40 | 0.5 | GY/VT | 2404 | Engine Block Coolant Temperature Signal | II | — |
| 41 - 44 | — | — | — | Not Occupied | — | — |
| 45 | 0.75 | GN | 6935 | Heated Oxygen Sensor Current Adjust Signal | II | — |
| 46 | 0.75 | BN/WH | 6933 | Heated Oxygen Sensor Current Pump Signal | II | — |
| 47 | 0.5 | GN/VT | 4621 | Local Interconnect Network Serial Data Bus 21 | II | — |
| 48 | 0.5 | GN/WH | 4622 | Local Interconnect Network Serial Data Bus 22 | II | — |
| 49 | 2 | BK/WH | 451 | Signal Ground | I | — |

# K20 Engine Control Module X3 (L3B)



1590596

## Connector Part Information

Harness Type: Engine
OEM Connector: 15497996
Service Connector: 88988372
Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with GY Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576377 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | A | 4 |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K20 Engine Control Module X3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.75 | GN | 3060 | Turbo Bypass Solenoid Control Bank 1 | II | — |
| 3 | 0.5 | BN | 25 | Charge Indicator Control | II | — |
| 4 | 0.5 | VT/BU | 6091 | Crankshaft Position Sensor Replicated Signal | II | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | VT/BU | 6270 | Crankshaft 60X Sensor 5V Reference | II | — |
| 7 | 0.5 | BN/RD | 2701 | Throttle Position Sensor 5V Reference | II | — |
| 8 | 0.5 | BU/WH | 7446 | Fuel Line Pressure Sensor Signal | II | — |
| 9 | 0.5 | GN/WH | 432 | Manifold Absolute Pressure Sensor Signal | II | — |
| 10 | 0.75 | VT/BU | 3120 | Heated Oxygen Sensor High Signal Bank 1 Sensor 2 | II | — |
| 11 | 0.75 | WH/YE | 3121 | Heated Oxygen Sensor Low Signal Bank 1 Sensor 2 | II | — |
| 12 | 0.5 | VT/BN | 5284 | Camshaft Phaser Intake Solenoid 1 | II | — |
| 13 | 0.5 | GY/BU | 5282 | Camshaft Phaser Exhaust Solenoid 1 | II | — |
| 14 | 0.75 | BU | 2976 | Coolant Diverter Valve Actuator Control Low | II | — |
| 15 | 0.75 | WH/BN | 2591 | Turbo Charger Wastegate Motor Open Control | II | — |
| 16 | 0.75 | WH/BU | 2592 | Turbo Charger Wastegate Motor Close Control | II | — |
| 17 - 19 | — | — | — | Not Occupied | — | — |
| 20 | 0.5 | BN/YE | 4066 | Powertrain Mount Solenoid Control 2 | II | — |

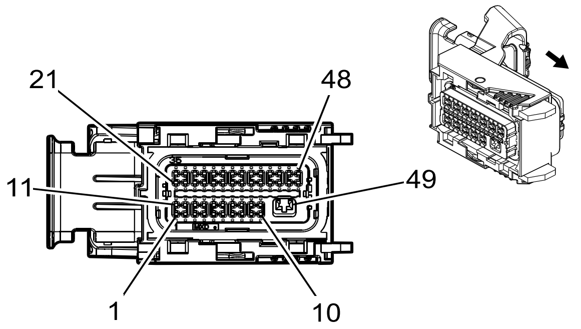
## K20 Engine Control Module X3 (L3B) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 21 | 0.75 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | II | — |
| 22 | 0.5 | BK/VT | 6272 | Crankshaft 60X Sensor Low Reference | II | — |
| 23 | 0.5 | BK/BN | 2752 | Throttle Position Sensor Low Reference | II | — |
| 24 | 0.5 | YE/BU | 2408 | Engine Inlet Coolant Temperature Signal | II | — |
| 25 | 0.5 | VT | 2988 | Engine Outlet Coolant Temperature Signal | II | — |
| 26 | 0.5 | BN | 7348 | Induction Air Temperature Sensor 2 Signal | II | — |
| 27 | 0.5 | BN | 906 | Engine Coolant Temperature Sensor 3 Signal | II | — |
| 28 | 0.5 | BK/BN | 6753 | Cam Phaser W Low Reference | II | — |
| 29 | 0.5 | BK/VT | 6754 | Cam Phaser X Low Reference | II | — |
| 30 | 0.5 | YE | 581 | Throttle Actuator Control Open | II | — |
| 31 | 0.5 | BN/WH | 582 | Throttle Actuator Control Close | II | — |
| 32 | 0.75 | BU/BN | 2977 | Coolant Diverter Valve Actuator Control High | II | — |
| 33 | 0.5 | VT/GY | 496 | Knock Sensor Signal 1 | II | — |
| 34 | 0.5 | WH/GY | 1876 | Knock Sensor Signal 2 | II | — |
| 35 | 0.5 | BK/GN | 469 | Manifold Absolute Pressure Sensor Low Reference | II | — |
| 36 | 0.75 | GN/BU | 428 | EVAP Canister Purge Solenoid Control | II | — |
| 37 - 38 | — | — | — | Not Occupied | — | — |
| 39 | 0.5 | BK/GN | 5301 | Camshaft Position Intake Sensor Low Reference 1 | II | — |
| 40 | 0.5 | BK/GY | 5296 | Camshaft Position Exhaust Sensor Low Reference 1 | II | — |
| 41 | — | — | — | Not Occupied | — | — |
| 42 | 0.5 | VT/BK | 5273 | Camshaft Position Exhaust Sensor 1 | II | — |
| 43 | 0.5 | GN | 6271 | Crankshaft 60X Sensor Signal | II | — |
| 44 | 0.5 | YE/BU | 2124 | Ignition Control 4 | II | — |
| 45 | 0.5 | BU/WH | 2122 | Ignition Control 2 | II | — |
| 46 | 0.5 | BK/BU | 2129 | Ignition Control Low Reference Bank 1 | II | — |
| 47 | 0.75 | GY/WH | 3122 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2 | II | — |
| 48 | 0.5 | BU/WH | 3630 | Throttle Position Sensor (SENT1) Signal | II | — |
| 49 | 0.75 | BU/WH | 4904 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4 | II | — |
| 50 | 0.75 | GY/BU | 4804 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 4 | II | — |
| 51 | 0.75 | BU/GY | 4902 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2 | II | — |
| 52 | 0.75 | BU | 4802 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 | II | — |
| 53 | 0.5 | BK/YE | 1716 | Knock Sensor Low Reference 1 | II | — |
| 54 | 0.5 | BK/GY | 2303 | Knock Sensor Low Reference 2 | II | — |
| 55 | 0.5 | GY/RD | 2704 | Manifold Absolute Pressure Sensor 5V Reference | II | — |
| 56 | 0.5 | YE/BN | 106 | Oil Pump Motor Control | II | — |
| 57 | 0.5 | BU | 179 | Oil Pump Command Signal | II | — |
| 58 | — | — | — | Not Occupied | — | — |
| 59 | 0.5 | GY/BU | 5300 | Camshaft Position Intake Sensor Control 1 | II | — |
| 60 | 0.5 | GY/YE | 5297 | Camshaft Position Exhaust Sensor Control 1 | II | — |

## K20 Engine Control Module X3 (L3B) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 61 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | II | — |
| 62 | — | — | — | Not Occupied | — | — |
| 63 | 0.5 | YE/VT | 5275 | Camshaft Position Intake Sensor 1 | II | — |
| 64 | 0.5 | BU/VT | 2121 | Ignition Control 1 | II | — |
| 65 | 0.5 | GN/BU | 2123 | Ignition Control 3 | II | — |
| 66 | — | — | — | Not Occupied | — | — |
| 67 | 0.75 | VT/BK | 7300 | High Pressure Fuel Pump Actuator Low - Control | II | — |
| 68 | 0.75 | YE | 7301 | High Pressure Fuel Pump Actuator High - Control | II | — |
| 69 | 0.75 | BN/WH | 4901 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 | II | — |
| 70 | 0.75 | BN | 4801 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 | II | — |
| 71 | 0.75 | GN/GY | 4903 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3 | II | — |
| 72 | 0.75 | GN | 4803 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 3 | II | — |
| 73 | 2 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | I | — |

# K20 Engine Control Module X1 (L82)



4596458

## Connector Part Information

Harness Type: Engine
OEM Connector: 33315785
Service Connector: 19368142
Description: 49-Way F 0.64, 2.8 Series, Sealed (BK with BU Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576377 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | A | 4 |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

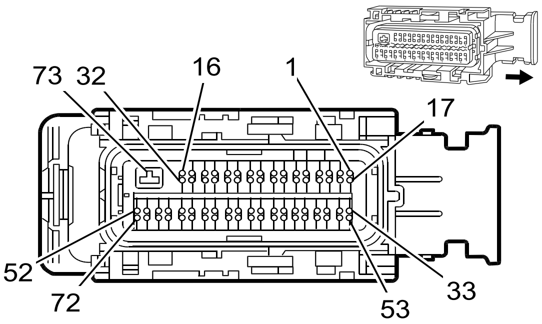
## K20 Engine Control Module X1 (L82)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/WH | 492 | Mass Air Flow Sensor Signal | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | WH | 4499 | High Speed GMLAN Serial Data (-) 7 | II | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | WH | 7494 | High Speed GMLAN Serial Data (-)3 | II | — |
| 6 | 0.5 | WH/BU | 6311 | Cruise/ETC/TCC Brake Signal | II | — |
| 7 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | II | — |
| 8 | 0.5 | BN/WH | 419 | Check Engine Indicator Control | II | — |
| 9 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | II | — |
| 10 | 0.5 | BN/YE | 473 | High Speed Cooling Fan Relay Control | II | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | BU/GY | 636 | Outside Ambient Air Temperature Sensor Signal | II | — |
| 13 | 0.5 | BU/BN | 4498 | High Speed GMLAN Serial Data (+) 7 | II | — |
| 14 | 0.5 | WH/GN | 5380 | Brake Position Sensor Signal | II | — |
| 15 | 0.5 | BU/BK | 7493 | High Speed GMLAN Serial Data (+)3 | II | — |
| 16 | 0.5 | WH/GY | 1786 | Transmission Park/Neutral Signal 1 | II | — |
| 17 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | — |
| 18 | 0.5 | WH/GY | 459 | A/C Compressor Clutch Relay Control | II | — |
| 19 - 20 | — | — | — | Not Occupied | — | — |

## K20 Engine Control Module X1 (L82) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 21 | 0.5 | GN/BU | 428 | EVAP Canister Purge Solenoid Control | II | — |
| 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | II | — |
| 24 | 0.5 | BK/BU | 1271 | Accelerator Pedal Position Low Reference 1 | II | — |
| 25 - 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.5 | BN/GN | 1174 | Oil Level Switch Signal | II | — |
| 29 | — | — | — | Not Occupied | — | — |
| 30 | 0.5 | BK/VT | 1272 | Accelerator Pedal Position Low Reference 2 | II | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.75 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | II | — |
| 33 | 0.5 | VT/YE | 5985 | Accessory Wakeup Serial Data | II | — |
| 34 | 0.5 | RD/BN | 440 | Battery Positive Voltage | II | — |
| 35 | 0.5 | VT/YE | 3854 | Cabin Heater Coolant Motor Control | II | — |
| 36 | 0.5 | YE/BK | 625 | Starter Enable Relay Control | II | — |
| 37 | 0.5 | GN/GY | 465 | Fuel Pump Primary Relay Control | II | — |
| 38 | 0.5 | WH/RD | 1164 | Accelerator Pedal Position 5V Reference 1 | II | — |
| 39 | 0.5 | YE/WH | 1161 | Accelerator Pedal Position Signal 1 | II | — |
| 40 | 0.5 | YE/BN | 331 | Oil Pressure Sensor Signal | II | — |
| 41 | 0.5 | GN | 380 | A/C Refrigerant Pressure Sensor Signal | II | — |
| 42 | 0.5 | WH | 1579 | Fuel Temperature/Composition Signal | II | — |
| 43 | — | — | — | Not Occupied | — | — |
| 44 | 0.5 | GN/WH | 1162 | Accelerator Pedal Position Signal 2 | II | — |
| 45 | 0.5 | BN/RD | 1274 | Accelerator Pedal Position 5V Reference 2 | II | — |
| 46 | 0.5 | YE | 4063 | Hood Status A Signal | II | — |
| 47 | 0.5 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| 48 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |
| 49 | 2 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | I | — |

# K20 Engine Control Module X2 (L82)



## Connector Part Information

Harness Type: Engine
OEM Connector: 15499466
Service Connector: 88988931
Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with BK Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576377 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | 4 | D |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

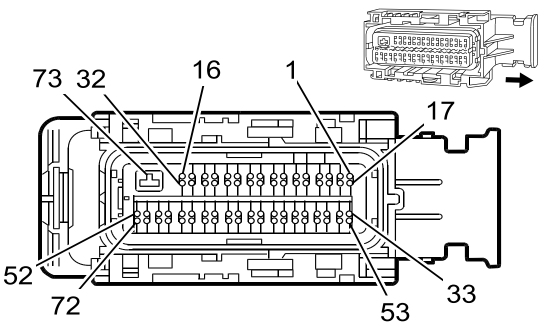
## K20 Engine Control Module X2 (L82)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/YE | 3212 | Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1 | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | II | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | GN/WH | 4622 | Local Interconnect Network Serial Data Bus 22 | II | — |
| 8 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.5 | VT/GY | 3110 | Heated Oxygen Sensor High Signal Bank 1 Sensor 1 | II | — |
| 11 | 0.5 | WH/BK | 3111 | Heated Oxygen Sensor Low Signal Bank 1 Sensor 1 | II | — |
| 12 | 0.5 | YE/BU | 2124 | Ignition Control 4 | II | — |
| 13 | 0.5 | BN/BU | 2126 | Ignition Control 6 | II | — |
| 14 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |
| 15 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |
| 16 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |
| 17 | 0.5 | GY/WH | 3113 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1 | II | — |
| 18 - 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | WH/BN | 2203 | Enhanced Driver Mode 2 Switch Signal | II | — |

## K20 Engine Control Module X2 (L82) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 22 - 25 | — | — | — | Not Occupied | — | — |
| 26 | 0.5 | VT/WH | 3210 | Heated Oxygen Sensor High Signal Bank 2 Sensor 1 | II | — |
| 27 | 0.5 | YE/WH | 3211 | Heated Oxygen Sensor Low Signal Bank 2 Sensor 1 | II | — |
| 28 | 0.5 | GN/BU | 2123 | Ignition Control 3 | II | — |
| 29 | 0.5 | BU/GY | 2125 | Ignition Control 5 | II | — |
| 30 | 0.5 | BK/GY | 2130 | Ignition Control Low Reference Bank 2 | II | — |
| 31 | 0.5 | BN | 5496 | Cylinder Shutoff Solenoid Control 6 | II | — |
| 32 | 0.5 | YE/BN | 2496 | Cylinder Shutoff Solenoid Enable (6) | II | — |
| 33 | 0.5 | WH/BN | 3223 | Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2 | II | — |
| 34 | — | — | — | Not Occupied | — | — |
| 35 | 0.5 | BU | 179 | Oil Pump Command Signal | II | — |
| 36 | 0.5 | YE/GN | 2494 | Cylinder Shutoff Solenoid Enable (4) | II | — |
| 37 | 0.75 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | II | — |
| 38 | — | — | — | Not Occupied | — | — |
| 39 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | II | — |
| 40 - 45 | — | — | — | Not Occupied | — | — |
| 46 | 0.5 | YE/BU | 3221 | Heated Oxygen Sensor Low Signal Bank 2 Sensor 2 | II | — |
| 47 | 0.5 | VT/GN | 3220 | Heated Oxygen Sensor High Signal Bank 2 Sensor 2 | II | — |
| 48 - 49 | — | — | — | Not Occupied | — | — |
| 50 | 0.75 | BK/GY | 2303 | Knock Sensor Low Reference 2 | II | — |
| 51 | 0.75 | BK/YE | 1716 | Knock Sensor Low Reference 1 | II | — |
| 52 | 0.5 | BN/WH | 582 | Throttle Actuator Control Close | II | — |
| 53 | 0.5 | GY/WH | 3122 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2 | II | — |
| 54 - 55 | — | — | — | Not Occupied | — | — |
| 56 | 0.5 | YE/BU | 5494 | Cylinder Shutoff Solenoid Control 4 | II | — |
| 57 - 58 | — | — | — | Not Occupied | — | — |
| 59 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | II | — |
| 60 - 65 | — | — | — | Not Occupied | — | — |
| 66 | 0.5 | WH/YE | 3121 | Heated Oxygen Sensor Low Signal Bank 1 Sensor 2 | II | — |
| 67 | 0.5 | VT/BU | 3120 | Heated Oxygen Sensor High Signal Bank 1 Sensor 2 | II | — |
| 68 - 69 | — | — | — | Not Occupied | — | — |
| 70 | 0.75 | WH/GY | 1876 | Knock Sensor Signal 2 | II | — |
| 71 | 0.75 | VT/GY | 496 | Knock Sensor Signal 1 | II | — |
| 72 | 0.5 | YE | 581 | Throttle Actuator Control Open | II | — |
| 73 | 2.5 | BK/WH | 451 | Signal Ground | I | — |

# K20 Engine Control Module X3 (L82)



1590596

## Connector Part Information

Harness Type: Engine
OEM Connector: 15497996
Service Connector: 88988372
Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with GY Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576377 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | 4 | D |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K20 Engine Control Module X3 (L82)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 5497 | Cylinder Shutoff Solenoid Control 7 | II | — |
| 2 | 0.5 | GN/GY | 2497 | Cylinder Shutoff Solenoid Enable (7) | II | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | VT/BN | 5284 | Camshaft Phaser Intake Solenoid 1 | II | — |
| 6 | 0.5 | VT/GN | 4320 | Selective Catalytic Reduction Power Module Wake-Up Signal | II | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | YE/VT | 5275 | Camshaft Position Intake Sensor 1 | II | — |
| 9 | 0.5 | GY/BU | 5300 | Camshaft Position Intake Sensor Control 1 | II | — |
| 10 | 0.5 | GN | 6271 | Crankshaft 60X Sensor Signal | II | — |
| 11 | 0.5 | VT/BU | 6091 | Crankshaft Position Sensor Replicated Signal | II | — |
| 12 | 0.5 | BU/WH | 2122 | Ignition Control 2 | II | — |
| 13 | 0.5 | VT/WH | 2128 | Ignition Control 8 | II | — |
| 14 | 0.5 | BN | 25 | Charge Indicator Control | II | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.75 | YE | 7301 | High Pressure Fuel Pump Actuator High - Control | II | — |
| 17 - 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.5 | BN/WH | 6354 | Output Speed High (Replicated TOS) Input Signal | II | — |

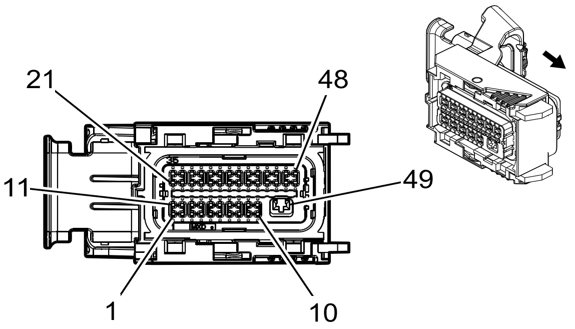
## K20 Engine Control Module X3 (L82) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | BK/BN | 6753 | Cam Phaser W Low Reference | II | — |
| 22 - 23 | — | — | — | Not Occupied | — | — |
| 24 | 0.5 | BK/GN | 5301 | Camshaft Position Intake Sensor Low Reference 1 | II | — |
| 25 | 0.5 | VT/BU | 6270 | Crankshaft 60X Sensor 5V Reference | II | — |
| 26 | 0.5 | BK/VT | 6272 | Crankshaft 60X Sensor Low Reference | II | — |
| 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.5 | GN/GY | 2127 | Ignition Control 7 | II | — |
| 29 | 0.5 | BU/VT | 2121 | Ignition Control 1 | II | — |
| 30 | 0.5 | BK/BU | 2129 | Ignition Control Low Reference Bank 1 | II | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.75 | VT/BK | 7300 | High Pressure Fuel Pump Actuator Low - Control | II | — |
| 33 | 0.5 | YE/VT | 4325 | Starter Pinion Solenoid Relay Control | II | — |
| 34 | 0.5 | WH/BU | 2491 | Cylinder Shutoff Solenoid Enable (1) | II | — |
| 35 | — | — | — | Not Occupied | — | — |
| 36 | 0.5 | BK/BN | 2752 | Throttle Position Sensor Low Reference | II | — |
| 37 | 0.5 | BK/GN | 469 | Manifold Absolute Pressure Sensor Low Reference | II | — |
| 38 - 39 | — | — | — | Not Occupied | — | — |
| 40 | 0.5 | BN/BU | 357 | Oil Temperature Sensor Signal | II | — |
| 41 - 42 | — | — | — | Not Occupied | — | — |
| 43 | 0.5 | BK/GY | 626 | Engine Control Sensors Low Reference (3) | II | — |
| 44 | 0.75 | VT/BU | 5292 | Powertrain Main Relay Fused Supply 3 | II | — |
| 45 | 0.75 | GN | 4803 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 3 | II | — |
| 46 | 0.75 | GY/BU | 4804 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 4 | II | — |
| 47 | 0.75 | WH/GN | 4805 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 5 | II | — |
| 48 | 0.75 | GN/VT | 4806 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 6 | II | — |
| 49 | 0.75 | BU | 4802 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 | II | — |
| 50 | 0.75 | YE/GY | 4807 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 7 | II | — |
| 51 | 0.75 | GY | 4808 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 8 | II | — |
| 52 | 0.75 | BN | 4801 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 | II | — |
| 53 | 0.5 | BU | 5491 | Cylinder Shutoff Solenoid Control 1 | II | — |
| 54 | — | — | — | Not Occupied | — | — |
| 55 | 0.5 | BN/RD | 2701 | Throttle Position Sensor 5V Reference | II | — |
| 56 | 0.5 | BU/WH | 3630 | Throttle Position Sensor (SENT1) Signal | II | — |
| 57 | 0.5 | GY/RD | 2704 | Manifold Absolute Pressure Sensor 5V Reference | II | — |
| 58 | 0.5 | GN/WH | 432 | Manifold Absolute Pressure Sensor Signal | II | — |
| 59 | — | — | — | Not Occupied | — | — |

## K20 Engine Control Module X3 (L82) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 60 | 0.5 | BU/WH | 7446 | Fuel Line Pressure Sensor Signal | II | — |
| 61 | 0.5 | BU | 410 | Engine Coolant Temperature Sensor Signal | II | — |
| 62 | — | — | — | Not Occupied | — | — |
| 63 | 0.5 | BU/WH | 2918 | Fuel Rail Pressure Sensor Signal | II | — |
| 64 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | II | — |
| 65 | 0.75 | GN/BK | 4903 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3 | II | — |
| 66 | 0.75 | BU/WH | 4904 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4 | II | — |
| 67 | 0.75 | GN/WH | 4905 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5 | II | — |
| 68 | 0.75 | VT | 4906 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6 | II | — |
| 69 | 0.75 | BN/GN | 4902 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2 | II | — |
| 70 | 0.75 | WH/YE | 4907 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 7 | II | — |
| 71 | 0.75 | WH/GN | 4908 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 8 | II | — |
| 72 | 0.75 | BN/WH | 4901 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 | II | — |
| 73 | 2.5 | BK/WH | 451 | Signal Ground | I | — |

# K20 Engine Control Module X1 (L84/L87)



4596458

## Connector Part Information

Harness Type: Engine
OEM Connector: 33315785
Service Connector: 19368142
Description: 49-Way F 0.64, 2.8 Series, Sealed (BK with BU Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576377 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | A | 4 |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

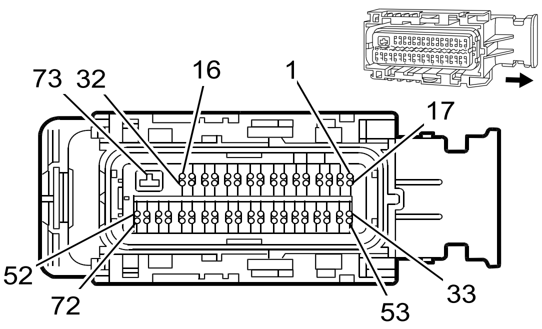
## K20 Engine Control Module X1 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/WH | 492 | Mass Air Flow Sensor Signal | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | WH | 4499 | High Speed GMLAN Serial Data (-) 7 | II | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | WH | 7494 | High Speed GMLAN Serial Data (-)3 | II | — |
| 6 | 0.5 | WH/BU | 6311 | Cruise/ETC/TCC Brake Signal | II | — |
| 7 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | II | — |
| 8 | 0.5 | BN/WH | 419 | Check Engine Indicator Control | II | — |
| 9 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | II | — |
| 10 | 0.5 | BN/YE | 473 | High Speed Cooling Fan Relay Control | II | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | BU/GY | 636 | Outside Ambient Air Temperature Sensor Signal | II | — |
| 13 | 0.5 | BU/BN | 4498 | High Speed GMLAN Serial Data (+) 7 | II | — |
| 14 | 0.5 | WH/GN | 5380 | Brake Position Sensor Signal | II | — |
| 15 | 0.5 | BU/BK | 7493 | High Speed GMLAN Serial Data (+)3 | II | — |
| 16 | 0.5 | WH/GY | 1786 | Transmission Park/Neutral Signal 1 | II | — |
| 17 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | — |
| 18 | 0.5 | WH/GY | 459 | A/C Compressor Clutch Relay Control | II | — |
| 19 - 20 | — | — | — | Not Occupied | — | — |

## K20 Engine Control Module X1 (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 21 | 0.5 | GN/BU | 428 | EVAP Canister Purge Solenoid Control | II | — |
| 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | II | — |
| 24 | 0.5 | BK/BU | 1271 | Accelerator Pedal Position Low Reference 1 | II | — |
| 25 - 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.5 | WH/BU | 5726 | Ignition Mode Switch Mode Control Backup | II | — |
| 28 | 0.5 | BN/GN | 1174 | Oil Level Switch Signal | II | — |
| 29 | — | — | — | Not Occupied | — | — |
| 30 | 0.5 | BK/VT | 1272 | Accelerator Pedal Position Low Reference 2 | II | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.75 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | II | — |
| 33 | 0.5 | VT/YE | 5985 | Accessory Wakeup Serial Data | II | — |
| 34 | 0.5 | RD/BN | 440 | Battery Positive Voltage | II | — |
| 35 | 0.5 | VT/YE | 3854 | Cabin Heater Coolant Motor Control | II | — |
| 36 | 0.5 | YE/BK | 625 | Starter Enable Relay Control | II | — |
| 37 | 0.5 | GN/GY | 465 | Fuel Pump Primary Relay Control | II | — |
| 38 | 0.5 | WH/RD | 1164 | Accelerator Pedal Position 5V Reference 1 | II | — |
| 39 | 0.5 | YE/WH | 1161 | Accelerator Pedal Position Signal 1 | II | — |
| 40 | 0.5 | YE/BN | 331 | Oil Pressure Sensor Signal | II | — |
| 41 | 0.5 | GN | 380 | A/C Refrigerant Pressure Sensor Signal | II | — |
| 42 - 43 | — | — | — | Not Occupied | — | — |
| 44 | 0.5 | GN/WH | 1162 | Accelerator Pedal Position Signal 2 | II | — |
| 45 | 0.5 | BN/RD | 1274 | Accelerator Pedal Position 5V Reference 2 | II | — |
| 46 | 0.5 | YE | 4063 | Hood Status A Signal | II | — |
| 47 | 0.5 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| 48 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |
| 49 | 2 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | I | — |

# K20 Engine Control Module X2 (L84/L87)



1590596

## Connector Part Information

Harness Type: Engine

OEM Connector: 15499466

Service Connector: 88988931

Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with BK Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576377 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | 4 | D |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

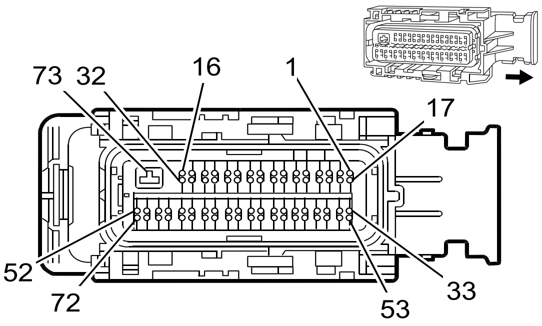
## K20 Engine Control Module X2 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/YE | 3212 | Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1 | II | — |
| 2 | 0.5 | GY | 5493 | Cylinder Shutoff Solenoid Control 3 | II | — |
| 3 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | II | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | GN/WH | 4622 | Local Interconnect Network Serial Data Bus 22 | II | — |
| 8 | 0.5 | GN/VT | 4621 | Local Interconnect Network Serial Data Bus 21 | II | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.5 | VT/GY | 3110 | Heated Oxygen Sensor High Signal Bank 1 Sensor 1 | II | — |
| 11 | 0.5 | WH/BK | 3111 | Heated Oxygen Sensor Low Signal Bank 1 Sensor 1 | II | — |
| 12 | 0.5 | YE/BU | 2124 | Ignition Control 4 | II | — |
| 13 | 0.5 | BN/BU | 2126 | Ignition Control 6 | II | — |
| 14 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |
| 15 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |
| 16 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |
| 17 | 0.5 | GY/WH | 3113 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1 | II | — |
| 18 | 0.5 | YE/GY | 2493 | Cylinder Shutoff Solenoid Enable (3) | II | — |

## K20 Engine Control Module X2 (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 19 - 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | WH/BN | 2203 | Enhanced Driver Mode 2 Switch Signal | II | — |
| 22 - 25 | — | — | — | Not Occupied | — | — |
| 26 | 0.5 | VT/WH | 3210 | Heated Oxygen Sensor High Signal Bank 2 Sensor 1 | II | — |
| 27 | 0.5 | YE/WH | 3211 | Heated Oxygen Sensor Low Signal Bank 2 Sensor 1 | II | — |
| 28 | 0.5 | GN/BU | 2123 | Ignition Control 3 | II | — |
| 29 | 0.5 | BU/GY | 2125 | Ignition Control 5 | II | — |
| 30 | 0.5 | BK/GY | 2130 | Ignition Control Low Reference Bank 2 | II | — |
| 31 | 0.5 | BN | 5496 | Cylinder Shutoff Solenoid Control 6 | II | — |
| 32 | 0.5 | YE/BN | 2496 | Cylinder Shutoff Solenoid Enable (6) | II | — |
| 33 | 0.5 | WH/BN | 3223 | Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2 | II | — |
| 34 | — | — | — | Not Occupied | — | — |
| 35 | 0.5 | BU | 179 | Oil Pump Command Signal | II | — |
| 36 | 0.5 | YE/GN | 2494 | Cylinder Shutoff Solenoid Enable (4) | II | — |
| 37 | 0.75 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | II | — |
| 38 | — | — | — | Not Occupied | — | — |
| 39 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | II | — |
| 40 - 45 | — | — | — | Not Occupied | — | — |
| 46 | 0.5 | YE/BU | 3221 | Heated Oxygen Sensor Low Signal Bank 2 Sensor 2 | II | — |
| 47 | 0.5 | VT/GN | 3220 | Heated Oxygen Sensor High Signal Bank 2 Sensor 2 | II | — |
| 48 - 49 | — | — | — | Not Occupied | — | — |
| 50 | 0.75 | BK/GY | 2303 | Knock Sensor Low Reference 2 | II | — |
| 51 | 0.75 | BK/YE | 1716 | Knock Sensor Low Reference 1 | II | — |
| 52 | 0.5 | BN/WH | 582 | Throttle Actuator Control Close | II | — |
| 53 | 0.5 | GY/WH | 3122 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2 | II | — |
| 54 | 0.5 | VT | 5495 | Cylinder Shutoff Solenoid Control 5 | II | — |
| 55 | 0.5 | WH/VT | 2495 | Cylinder Shutoff Solenoid Enable (5) | II | — |
| 56 | 0.5 | YE/BU | 5494 | Cylinder Shutoff Solenoid Control 4 | II | — |
| 57 | 0.5 | GN | 5492 | Cylinder Shutoff Solenoid Control 2 | II | — |
| 58 | 0.5 | WH/GN | 2492 | Cylinder Shutoff Solenoid Enable (2) | II | — |
| 59 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | II | — |
| 60 - 65 | — | — | — | Not Occupied | — | — |
| 66 | 0.5 | WH/YE | 3121 | Heated Oxygen Sensor Low Signal Bank 1 Sensor 2 | II | — |
| 67 | 0.5 | VT/BU | 3120 | Heated Oxygen Sensor High Signal Bank 1 Sensor 2 | II | — |
| 68 - 69 | — | — | — | Not Occupied | — | — |
| 70 | 0.75 | WH/GY | 1876 | Knock Sensor Signal 2 | II | — |
| 71 | 0.75 | VT/GY | 496 | Knock Sensor Signal 1 | II | — |
| 72 | 0.5 | YE | 581 | Throttle Actuator Control Open | II | — |
| 73 | 2.5 | BK/WH | 451 | Signal Ground | I | — |

# K20 Engine Control Module X3 (L84/L87)



1590596

## Connector Part Information

Harness Type: Engine
OEM Connector: 15497996
Service Connector: 88988372
Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with GY Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576377 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | 4 | D |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K20 Engine Control Module X3 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 5497 | Cylinder Shutoff Solenoid Control 7 | II | — |
| 2 | 0.5 | GN/GY | 2497 | Cylinder Shutoff Solenoid Enable (7) | II | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | VT/BN | 5284 | Camshaft Phaser Intake Solenoid 1 | II | — |
| 6 | 0.5 | VT/GN | 4320 | Selective Catalytic Reduction Power Module Wake-Up Signal | II | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | YE/VT | 5275 | Camshaft Position Intake Sensor 1 | II | — |
| 9 | 0.5 | GY/BU | 5300 | Camshaft Position Intake Sensor Control 1 | II | — |
| 10 | 0.5 | GN | 6271 | Crankshaft 60X Sensor Signal | II | — |
| 11 | 0.5 | VT/BU | 6091 | Crankshaft Position Sensor Replicated Signal | II | — |
| 12 | 0.5 | BU/WH | 2122 | Ignition Control 2 | II | — |
| 13 | 0.5 | VT/WH | 2128 | Ignition Control 8 | II | — |
| 14 | 0.5 | BN | 25 | Charge Indicator Control | II | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.75 | YE | 7301 | High Pressure Fuel Pump Actuator High - Control | II | — |
| 17 - 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | BK/BN | 6753 | Cam Phaser W Low Reference | II | — |
| 22 - 23 | — | — | — | Not Occupied | — | — |

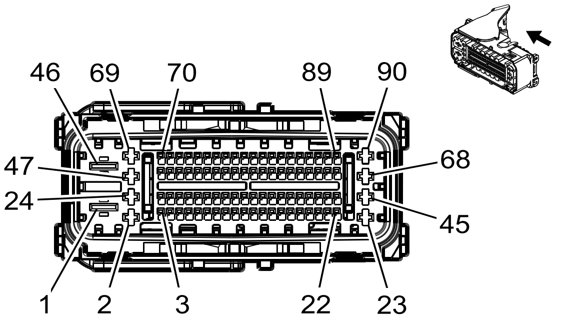
## K20 Engine Control Module X3 (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 24 | 0.5 | BK/GN | 5301 | Camshaft Position Intake Sensor Low Reference 1 | II | — |
| 25 | 0.5 | VT/BU | 6270 | Crankshaft 60X Sensor 5V Reference | II | — |
| 26 | 0.5 | BK/VT | 6272 | Crankshaft 60X Sensor Low Reference | II | — |
| 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.5 | GN/GY | 2127 | Ignition Control 7 | II | — |
| 29 | 0.5 | BU/VT | 2121 | Ignition Control 1 | II | — |
| 30 | 0.5 | BK/BU | 2129 | Ignition Control Low Reference Bank 1 | II | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.75 | VT/BK | 7300 | High Pressure Fuel Pump Actuator Low - Control | II | — |
| 33 | 0.5 | YE/VT | 4325 | Starter Pinion Solenoid Relay Control | II | — |
| 34 | 0.5 | WH/BU | 2491 | Cylinder Shutoff Solenoid Enable (1) | II | — |
| 35 | 0.5 | WH/YE | 2498 | Cylinder Shutoff Solenoid Enable (8) | II | — |
| 36 | 0.5 | BK/BN | 2752 | Throttle Position Sensor Low Reference | II | — |
| 37 | 0.5 | BK/GN | 469 | Manifold Absolute Pressure Sensor Low Reference | II | — |
| 38 - 39 | — | — | — | Not Occupied | — | — |
| 40 | 0.5 | BN/BU | 357 | Oil Temperature Sensor Signal | II | — |
| 41 - 42 | — | — | — | Not Occupied | — | — |
| 43 | 0.5 | BK/GY | 626 | Engine Control Sensors Low Reference (3) | II | — |
| 44 | 0.75 | VT/BU | 5292 | Powertrain Main Relay Fused Supply 3 | II | — |
| 45 | 0.75 | GN | 4803 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 3 | II | — |
| 46 | 0.75 | GY/BU | 4804 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 4 | II | — |
| 47 | 0.75 | WH/GN | 4805 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 5 | II | — |
| 48 | 0.75 | GN/VT | 4806 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 6 | II | — |
| 49 | 0.75 | BU | 4802 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 | II | — |
| 50 | 0.75 | YE/GY | 4807 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 7 | II | — |
| 51 | 0.75 | GY | 4808 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 8 | II | — |
| 52 | 0.75 | BN | 4801 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 | II | — |
| 53 | 0.5 | BU | 5491 | Cylinder Shutoff Solenoid Control 1 | II | — |
| 54 | 0.5 | YE | 5498 | Cylinder Shutoff Solenoid Control 8 | II | — |
| 55 | 0.5 | BN/RD | 2701 | Throttle Position Sensor 5V Reference | II | — |
| 56 | 0.5 | BU/WH | 3630 | Throttle Position Sensor (SENT1) Signal | II | — |
| 57 | 0.5 | GY/RD | 2704 | Manifold Absolute Pressure Sensor 5V Reference | II | — |
| 58 | 0.5 | GN/WH | 432 | Manifold Absolute Pressure Sensor Signal | II | — |
| 59 | — | — | — | Not Occupied | — | — |
| 60 | 0.5 | BU/WH | 7446 | Fuel Line Pressure Sensor Signal | II | — |
| 61 | 0.5 | BU | 410 | Engine Coolant Temperature Sensor Signal | II | — |
| 62 | — | — | — | Not Occupied | — | — |

## K20 Engine Control Module X3 (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 63 | 0.5 | BU/WH | 2918 | Fuel Rail Pressure Sensor Signal | II | — |
| 64 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | II | — |
| 65 | 0.75 | GN/BK | 4903 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3 | II | — |
| 66 | 0.75 | BU/WH | 4904 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4 | II | — |
| 67 | 0.75 | GN/WH | 4905 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5 | II | — |
| 68 | 0.75 | VT | 4906 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6 | II | — |
| 69 | 0.75 | BN/GN | 4902 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2 | II | — |
| 70 | 0.75 | WH/YE | 4907 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 7 | II | — |
| 71 | 0.75 | WH/GN | 4908 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 8 | II | — |
| 72 | 0.75 | BN/WH | 4901 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 | II | — |
| 73 | 2.5 | BK/WH | 451 | Signal Ground | I | — |

# K20 Engine Control Module X1 (LM2)



4997706

## Connector Part Information

Harness Type: Engine
OEM Connector: 35021651
Service Connector: 12670161
Description: 90-Way F 0.64 GEN-Y, 2.8, 6.3 MCP Series, Sealed (BU)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19368490 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19371214 | J-35616-35 (VT) | J-38125-557 | 1-968857-3 | Lear 7 | C | 1 |
| III | 19371214 | J-35616-35 (VT) | J-38125-557 | Not Available | Not Available | Not Available | Not Available |
| IV | 84616649 | J-35616-40 (BU) | J-38125-556 | Not Available | Not Available | Not Available | Not Available |

## K20 Engine Control Module X1 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 6 | BK/WH | 451 | Signal Ground | IV | — |
| 2 | 1 | YE/VT | 2420 | Fuel High Pressure Pump Low Enable | III | — |
| 3 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | BN/BU | 4065 | Powertrain Mount Solenoid Control 1 | I | — |
| 6 | 0.5 | BN/YE | 473 | High Speed Cooling Fan Relay Control | I | — |
| 7 | 0.5 | WH/GY | 459 | A/C Compressor Clutch Relay Control | I | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.5 | VT/GY | 7246 | Exhaust Gas Recirculation Differential Pressure Signal | I | — |
| 10 | 0.5 | YE/GY | 3926 | Crankcase Differential Pressure Sensor Signal | I | — |
| 11 - 14 | — | — | — | Not Occupied | — | — |
| 15 | 0.5 | GN | 380 | A/C Refrigerant Pressure Sensor Signal | I | — |
| 16 | 0.5 | BU/BN | 4498 | High Speed GMLAN Serial Data (+) 7 | I | — |
| 17 | 0.5 | BU/BK | 7493 | High Speed GMLAN Serial Data (+)3 | I | — |
| 18 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | I | — |

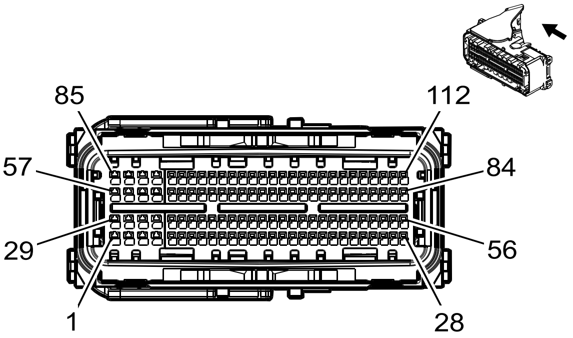
## K20 Engine Control Module X1 (LM2) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 19 | 0.75 | GY/BK | 1330 | Variable Geometry Turbocharger Position Sensor Motor Close Control | I | — |
| 20 | 0.75 | WH/VT | 5764 | Exhaust Gas Recirculation Valve Motor High Signal | I | — |
| 21 | 0.75 | WH/BN | 1313 | Variable Geometry Turbocharger Position Sensor Motor Open Control | I | — |
| 22 | 0.75 | VT/BK | 5746 | Exhaust Gas Recirculation Valve Motor Low Signal | I | — |
| 23 | 0.75 | RD/BN | 440 | Battery Positive Voltage | III | — |
| 24 | 0.75 | YE/VT | 7245 | High Pressure Fuel Pump Low Enable | III | — |
| 25 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 26 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | I | — |
| 27 | 0.5 | BN/WH | 419 | Check Engine Indicator Control | I | — |
| 28 | 0.5 | GN/BN | 507 | Wait To Start Indicator Control | I | — |
| 29 | 0.5 | WH/BN | 1089 | Coolant Pump Motor Relay Control | I | — |
| 30 | 0.5 | YE/BN | 331 | Oil Pressure Sensor Signal | I | — |
| 31 | 0.5 | WH/BN | 2203 | Enhanced Driver Mode 2 Switch Signal | I | — |
| 32 - 33 | — | — | — | Not Occupied | — | — |
| 34 | 0.5 | WH/BU | 6311 | Cruise/ETC/TCC Brake Signal | I | — |
| 35 | — | — | — | Not Occupied | — | — |
| 36 | 0.5 | GY/GN | 1417 | Low Pressure Exhaust Gas Recirculation Actuator Signal | I | — |
| 37 | 0.5 | WH/BU | 5726 | Ignition Mode Switch Mode Control Backup | I | — |
| 38 | 0.5 | WH | 4499 | High Speed GMLAN Serial Data (-) 7 | I | — |
| 39 | 0.5 | WH | 7494 | High Speed GMLAN Serial Data (-)3 | I | — |
| 40 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | I | — |
| 41 | — | — | — | Not Occupied | — | — |
| 42 | 0.75 | YE/BN | 1420 | Exhaust Restrictor Motor Open Control | I | — |
| 43 | — | — | — | Not Occupied | — | — |
| 44 | 0.75 | BN | 1421 | Exhaust Restrictor Motor Closed Control | I | — |
| 45 | — | — | — | Not Occupied | — | — |
| 46 | 4 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | IV | — |
| 47 | 1 | GY/BN | 2419 | Fuel High Pressure Pump High Side Supply | III | — |
| 48 | 0.5 | VT/YE | 5985 | Accessory Wakeup Serial Data | I | — |
| 49 | 0.5 | BK/VT | 1272 | Accelerator Pedal Position Low Reference 2 | I | — |
| 50 | 0.5 | GN/WH | 1162 | Accelerator Pedal Position Signal 2 | I | — |
| 51 | 0.5 | BN/RD | 1274 | Accelerator Pedal Position 5V Reference 2 | I | — |
| 52 | 0.5 | WH/GN | 5380 | Brake Position Sensor Signal | I | — |
| 53 | — | — | — | Not Occupied | — | — |
| 54 | 0.5 | YE | 4063 | Hood Status A Signal | I | — |
| 55 | — | — | — | Not Occupied | — | — |
| 56 | 0.5 | BK/GY | 626 | Engine Control Sensors Low Reference (3) | I | — |
| 57 | 0.5 | GY | 2973 | Coolant Flow Control Valve Position Signal | I | — |
| 58 | 0.5 | GN/GY | 7316 | Variable Swirl Valve PWM Control Signal | I | — |
| 59 - 60 | — | — | — | Not Occupied | — | — |
| 61 | 0.5 | GN/WH | 492 | Mass Air Flow Sensor Signal | I | — |
| 62 | — | — | — | Not Occupied | — | — |

## K20 Engine Control Module X1 (LM2) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 63 | 0.5 | YE/VT | 4325 | Starter Pinion Solenoid Relay Control | I | — |
| 64 | — | — | — | Not Occupied | — | — |
| 65 | 0.5 | GN/BU | 3889 | DEF Power Module Relay Control | I | — |
| 66 | 0.75 | GY/BU | 2971 | Coolant Flow Control Actuator Control Low | I | — |
| 67 | — | — | — | Not Occupied | — | — |
| 68 | 2.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |
| 69 | 0.75 | GY/BN | 7244 | High Pressure Fuel Pump High Side Supply | III | — |
| 70 | 0.75 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | I | — |
| 71 | 0.5 | BK/BU | 1271 | Accelerator Pedal Position Low Reference 1 | I | — |
| 72 | 0.5 | YE/WH | 1161 | Accelerator Pedal Position Signal 1 | I | — |
| 73 | 0.5 | WH/RD | 1164 | Accelerator Pedal Position 5V Reference 1 | I | — |
| 74 | 0.5 | BU/GY | 636 | Outside Ambient Air Temperature Sensor Signal | I | — |
| 75 | 0.5 | VT | 7485 | Oil Temperature Sensor Signal | I | — |
| 76 | 0.5 | BN | 4645 | Heater Core Outlet Temperature Signal | I | — |
| 77 | — | — | — | Not Occupied | — | — |
| 78 | 0.5 | GY/VT | 2404 | Engine Block Coolant Temperature Signal | I | — |
| 79 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |
| 80 | — | — | — | Not Occupied | — | — |
| 81 | 0.5 | VT/YE | 5947 | Variable Nozzle Turbo Position Sensor Signal | I | — |
| 82 | 0.5 | BN/WH | 5763 | Exhaust Gas Recirculation Valve Sensor Signal | I | — |
| 83 | 0.5 | BU/GY | 2978 | Coolant Diverter Valve Position Signal | I | — |
| 84 | — | — | — | Not Occupied | — | — |
| 85 | 0.5 | BN/GN | 4305 | Exhaust Flapper Valve Control 1 | I | — |
| 86 | 0.5 | GN/GY | 465 | Fuel Pump Primary Relay Control | I | — |
| 87 | 0.5 | YE/BK | 625 | Starter Enable Relay Control | I | — |
| 88 | 0.75 | GY/BN | 2972 | Coolant Flow Control Actuator Control High | I | — |
| 89 | — | — | — | Not Occupied | — | — |
| 90 | 2.5 | VT/BU | 5292 | Powertrain Main Relay Fused Supply 3 | II | — |

# K20 Engine Control Module X2 (LM2)



4997563

## Connector Part Information

Harness Type: Engine
OEM Connector: 35021652
Service Connector: 12670164
Description: 112-Way F 0.64 GEN-Y, 1.2 MCON Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19331730 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19331733 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19368490 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K20 Engine Control Module X2 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN | 4803 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 3 | I | — |
| 2 | 1.5 | GY/BU | 4804 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 4 | I | — |
| 3 | 0.5 | BK/YE | 2834 | Fuel Rail Pressure Solenoid Low Reference | II | — |
| 4 | 0.5 | BU/WH | 2530 | Fuel Rail Pressure Solenoid Control | II | — |
| 5 | 0.5 | BK/VT | 6272 | Crankshaft 60X Sensor Low Reference | III | — |
| 6 | 0.5 | GN | 6271 | Crankshaft 60X Sensor Signal | III | — |
| 7 | 0.5 | VT/BU | 6270 | Crankshaft 60X Sensor 5V Reference | III | — |
| 8 | 0.5 | VT/BU | 6091 | Crankshaft Position Sensor Replicated Signal | III | — |
| 9 | 0.75 | BN | 3099 | DEF Dosing Valve High Control | III | — |
| 10 | 0.5 | BN/YE | 4066 | Powertrain Mount Solenoid Control 2 | III | — |
| 11 | 0.5 | BN | 25 | Charge Indicator Control | III | — |
| 12 | 0.5 | BN/BU | 357 | Oil Temperature Sensor Signal | III | — |
| 13 | 0.5 | YE/BU | 2408 | Engine Inlet Coolant Temperature Signal | III | — |
| 14 | 0.5 | VT | 2988 | Engine Outlet Coolant Temperature Signal | III | — |
| 15 | 0.5 | YE/BK | 3000 | Coolant Temperature Sensor 2 Signal | III | — |
| 16 | 0.5 | BN/GY | 4644 | Heater Core Inlet Temperature Signal | III | — |

## K20 Engine Control Module X2 (LM2) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 17 | 0.5 | GN | 3683 | Charge Air Cooler Inlet Temperature Sensor Signal | III | — |
| 18 | 0.5 | YE/BK | 3682 | Charge Air Cooler Inlet Temperature Sensor Low Reference | III | — |
| 19 - 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | BN/YE | 1372 | Engine Metal Temperature Sensor Signal (2) | III | — |
| 22 | 0.5 | GY/BU | 6118 | Manifold Air Temperature Sensor Signal | III | — |
| 23 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | III | — |
| 24 | — | — | — | Not Occupied | — | — |
| 25 | 0.5 | YE/GN | 3236 | Exhaust Gas Recirculation Temperature Sensor 2 Signal | III | — |
| 26 | 0.75 | BU/WH | 4014 | Low Pressure Exhaust Gas Recirculation Actuator Control Open | III | — |
| 27 | 0.75 | BU/BN | 2977 | Coolant Diverter Valve Actuator Control High | III | — |
| 28 | 0.75 | BU | 2976 | Coolant Diverter Valve Actuator Control Low | III | — |
| 29 | 1.5 | GN/GY | 4903 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3 | I | — |
| 30 | 1.5 | BU/WH | 4904 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4 | I | — |
| 31 | 0.5 | BU | 179 | Oil Pump Command Signal | II | — |
| 32 | 0.5 | YE/BN | 106 | Oil Pump Motor Control | II | — |
| 33 | 0.5 | BK/GY | 5296 | Camshaft Position Exhaust Sensor Low Reference 1 | III | — |
| 34 | 0.5 | VT/BK | 5273 | Camshaft Position Exhaust Sensor 1 | III | — |
| 35 | 0.5 | GY/YE | 5297 | Camshaft Position Exhaust Sensor Control 1 | III | — |
| 36 | — | — | — | Not Occupied | — | — |
| 37 | 0.75 | BN/WH | 3100 | DEF Dosing Valve Low Control | III | — |
| 38 | — | — | — | Not Occupied | — | — |
| 39 | 0.5 | GY/BN | 7071 | Heater Fuel Control | III | — |
| 40 - 45 | — | — | — | Not Occupied | — | — |
| 46 | 0.75 | BU/WH | 3630 | Throttle Position Sensor (SENT1) Signal | III | — |
| 47 | 0.5 | BU/GN | 4012 | Low Pressure Exhaust Gas Recirculation Actuator Position Signal | III | — |
| 48 | 0.5 | GN/VT | 4621 | Local Interconnect Network Serial Data Bus 21 | III | — |
| 49 | 0.5 | GN/WH | 4622 | Local Interconnect Network Serial Data Bus 22 | III | — |
| 50 | — | — | — | Not Occupied | — | — |
| 51 | 0.5 | GN/BN | 2732 | Local Interconnect Network Bus 32 | III | — |
| 52 | — | — | — | Not Occupied | — | — |
| 53 | 0.5 | BK/YE | 6275 | Exhaust Gas Recirculation Temperature Sensor 2 Low Reference | III | — |
| 54 | — | — | — | Not Occupied | — | — |
| 55 | 0.75 | BU/BN | 4013 | Low Pressure Exhaust Gas Recirculation Actuator Control Close | III | — |
| 56 | — | — | — | Not Occupied | — | — |
| 57 | 1.5 | VT/GY | 4906 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6 | I | — |
| 58 | 1.5 | BN/WH | 4901 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 | I | — |

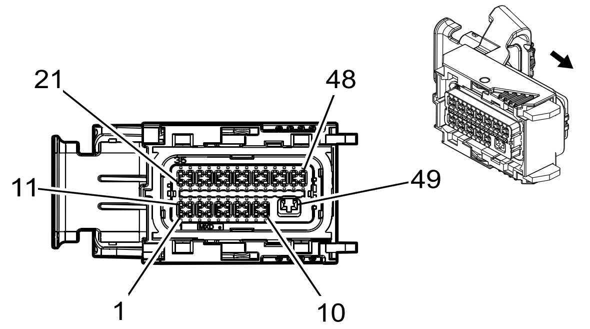
## K20 Engine Control Module X2 (LM2) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 59 | 1.5 | GN/WH | 4905 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5 | I | — |
| 60 | 1.5 | BU/GY | 4902 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2 | I | — |
| 61 - 67 | — | — | — | Not Occupied | — | — |
| 68 | 0.5 | BN/RD | 2917 | Fuel Rail Pressure Sensor 5V Reference | III | — |
| 69 | 0.5 | BK/GN | 2919 | Fuel Rail Pressure Sensor Low Reference | III | — |
| 70 | 0.5 | BN | 3681 | Charge Air Cooler Outlet Temperature Sensor Signal | III | — |
| 71 | 0.5 | YE/BU | 3680 | Charge Air Cooler Outlet Temperature Sensor Low Reference | III | — |
| 72 - 73 | — | — | — | Not Occupied | — | — |
| 74 | 0.5 | BK/BN | 6782 | Exhaust Gas Temperature Sensor 1 Low Reference | III | — |
| 75 | 0.5 | BU | 6053 | Exhaust Pressure Sensor Signal 1 | III | — |
| 76 | 0.5 | BK/GN | 3235 | Exhaust Gas Recirculation Temperature Sensor 3 Low Reference | III | — |
| 77 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | III | — |
| 78 | 0.5 | BU/BK | 1422 | Engine Water Charge Air Coolant Temperature Signal | III | — |
| 79 - 80 | — | — | — | Not Occupied | — | — |
| 81 | 0.5 | BK/GN | 3657 | Exhaust Gas Temperature Sensor 3 Low Reference | III | — |
| 82 - 83 | — | — | — | Not Occupied | — | — |
| 84 | 0.75 | BN/WH | 582 | Throttle Actuator Control Close | III | — |
| 85 | 1.5 | VT/GN | 4806 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 6 | I | — |
| 86 | 1.5 | BN | 4801 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 | I | — |
| 87 | 1.5 | BU | 4802 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 | I | — |
| 88 | 1.5 | WH/GN | 4805 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 5 | I | — |
| 89 - 95 | — | — | — | Not Occupied | — | — |
| 96 | 0.5 | BU/WH | 2918 | Fuel Rail Pressure Sensor Signal | III | — |
| 97 | 0.5 | BN/YE | 2161 | Fuel Rail Pressure Sensor 2 Signal | III | — |
| 98 - 100 | — | — | — | Not Occupied | — | — |
| 101 | 0.5 | GN/WH | 432 | Manifold Absolute Pressure Sensor Signal | III | — |
| 102 | 0.5 | BU/WH | 5277 | Exhaust Gas Temperature Sensor 1 | III | — |
| 103 | 0.5 | WH/GY | 3234 | Exhaust Gas Recirculation Temperature Sensor 3 Signal | III | — |
| 104 | 0.5 | BU/GN | 5377 | Exhaust Gas Temperature Sensor 2 | III | — |
| 105 | 0.5 | BK/BU | 6783 | Exhaust Gas Temperature Sensor 2 Low Reference | III | — |
| 106 | 0.5 | GN/YE | 37 | Engine Metal Temperature Sensor Signal | III | — |
| 107 - 108 | — | — | — | Not Occupied | — | — |
| 109 | 0.5 | GY/GN | 5378 | Exhaust Gas Temperature Sensor 3 | III | — |
| 110 | 0.75 | BK/BU | 1408 | Variable Swirl Valve Close Control | III | — |
| 111 | 0.75 | YE | 581 | Throttle Actuator Control Open | III | — |

## K20 Engine Control Module X2 (LM2) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 112 | 0.75 | BK/GN | 1389 | Variable Swirl Valve Open Control | III | — |

# K20 Engine Control Module X1 (LV3)



4596458

## Connector Part Information

Harness Type: Engine
OEM Connector: 33315785
Service Connector: 19368142
Description: 49-Way F 0.64, 2.8 Series, Sealed (BK with BU Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576377 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | A | 4 |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19355819 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

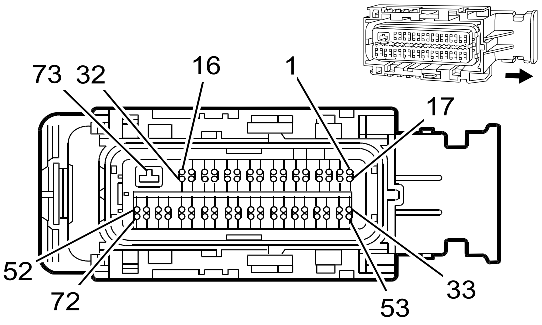
## K20 Engine Control Module X1 (LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/WH | 492 | Mass Air Flow Sensor Signal | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | WH | 4499 | High Speed GMLAN Serial Data (-) 7 | II | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | WH | 7494 | High Speed GMLAN Serial Data (-)3 | II | — |
| 6 | 0.5 | WH/BU | 6311 | Cruise/ETC/TCC Brake Signal | II | — |
| 7 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | III | — |
| 8 | 0.5 | BN/WH | 419 | Check Engine Indicator Control | II | — |
| 9 | 0.5 | YE | 5991 | Powertrain Relay Coil Control | II | — |
| 10 | 0.5 | BN/YE | 473 | High Speed Cooling Fan Relay Control | II | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | BU/GY | 636 | Outside Ambient Air Temperature Sensor Signal | II | — |
| 13 | 0.5 | BU/BN | 4498 | High Speed GMLAN Serial Data (+) 7 | II | — |
| 14 | 0.5 | WH/GN | 5380 | Brake Position Sensor Signal | II | — |
| 15 | 0.5 | BU/BK | 7493 | High Speed GMLAN Serial Data (+)3 | II | — |
| 16 | 0.5 | WH/GY | 1786 | Transmission Park/Neutral Signal 1 | II | — |
| 17 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | III | — |

## K20 Engine Control Module X1 (LV3) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 18 | 0.5 | WH/GY | 459 | A/C Compressor Clutch Relay Control | II | — |
| 19 - 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | GN/BU | 428 | EVAP Canister Purge Solenoid Control | II | — |
| 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | II | — |
| 24 | 0.5 | BK/BU | 1271 | Accelerator Pedal Position Low Reference 1 | II | — |
| 25 - 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.5 | BN/GN | 1174 | Oil Level Switch Signal | II | — |
| 29 | — | — | — | Not Occupied | — | — |
| 30 | 0.5 | BK/VT | 1272 | Accelerator Pedal Position Low Reference 2 | II | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.75 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | II | — |
| 33 | 0.5 | VT/YE | 5985 | Accessory Wakeup Serial Data | II | — |
| 34 | 0.5 | RD/BN | 440 | Battery Positive Voltage | II | — |
| 35 | — | — | — | Not Occupied | — | — |
| 36 | 0.5 | YE/BK | 625 | Starter Enable Relay Control | II | — |
| 37 | 0.5 | GN/GY | 465 | Fuel Pump Primary Relay Control | II | — |
| 38 | 0.5 | WH/RD | 1164 | Accelerator Pedal Position 5V Reference 1 | II | — |
| 39 | 0.5 | YE/WH | 1161 | Accelerator Pedal Position Signal 1 | II | — |
| 40 | 0.5 | YE/BN | 331 | Oil Pressure Sensor Signal | II | — |
| 41 | 0.5 | GN | 380 | A/C Refrigerant Pressure Sensor Signal | II | — |
| 42 - 43 | — | — | — | Not Occupied | — | — |
| 44 | 0.5 | GN/WH | 1162 | Accelerator Pedal Position Signal 2 | II | — |
| 45 | 0.5 | BN/RD | 1274 | Accelerator Pedal Position 5V Reference 2 | II | — |
| 46 | 0.5 | YE | 4063 | Hood Status A Signal | II | — |
| 47 | 0.5 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| 48 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |
| 49 | 2 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | I | — |

# K20 Engine Control Module X2 (LV3)



1590596

## Connector Part Information

Harness Type: Engine
OEM Connector: 15499466
Service Connector: 88988931
Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with BK Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576377 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | 4 | D |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

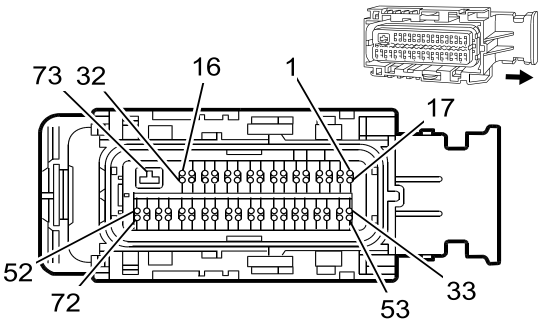
## K20 Engine Control Module X2 (LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/YE | 3212 | Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 1 | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | II | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | GN/WH | 4622 | Local Interconnect Network Serial Data Bus 22 | II | — |
| 8 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.5 | VT/GY | 3110 | Heated Oxygen Sensor High Signal Bank 1 Sensor 1 | II | — |
| 11 | 0.5 | WH/BK | 3111 | Heated Oxygen Sensor Low Signal Bank 1 Sensor 1 | II | — |
| 12 | — | — | — | Not Occupied | — | — |
| 13 | 0.5 | GN/BU | 2123 | Ignition Control 3 | II | — |
| 14 - 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.5 | VT/BU | 5290 | Powertrain Main Relay Fused Supply 1 | II | — |
| 17 | 0.5 | GY/WH | 3113 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 1 | II | — |
| 18 - 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | WH/BN | 2203 | Enhanced Driver Mode 2 Switch Signal | II | — |
| 22 - 25 | — | — | — | Not Occupied | — | — |

## K20 Engine Control Module X2 (LV3) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 26 | 0.5 | VT/WH | 3210 | Heated Oxygen Sensor High Signal Bank 2 Sensor 1 | II | — |
| 27 | 0.5 | YE/WH | 3211 | Heated Oxygen Sensor Low Signal Bank 2 Sensor 1 | II | — |
| 28 | — | — | — | Not Occupied | — | — |
| 29 | 0.5 | BU/WH | 2122 | Ignition Control 2 | II | — |
| 30 | 0.5 | BK/GY | 2130 | Ignition Control Low Reference Bank 2 | II | — |
| 31 - 32 | — | — | — | Not Occupied | — | — |
| 33 | 0.5 | WH/BN | 3223 | Heated Oxygen Sensor Heater Low Control Bank 2 Sensor 2 | II | — |
| 34 | — | — | — | Not Occupied | — | — |
| 35 | 0.5 | BU | 179 | Oil Pump Command Signal | II | — |
| 36 | — | — | — | Not Occupied | — | — |
| 37 | 0.5 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | II | — |
| 38 | — | — | — | Not Occupied | — | — |
| 39 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | II | — |
| 40 - 45 | — | — | — | Not Occupied | — | — |
| 46 | 0.5 | YE/BU | 3221 | Heated Oxygen Sensor Low Signal Bank 2 Sensor 2 | II | — |
| 47 | 0.5 | VT/GN | 3220 | Heated Oxygen Sensor High Signal Bank 2 Sensor 2 | II | — |
| 48 - 49 | — | — | — | Not Occupied | — | — |
| 50 | 0.75 | BK/GY | 2303 | Knock Sensor Low Reference 2 | II | — |
| 51 | 0.75 | BK/YE | 1716 | Knock Sensor Low Reference 1 | II | — |
| 52 | 0.5 | BN/WH | 582 | Throttle Actuator Control Close | II | — |
| 53 | 0.5 | GY/WH | 3122 | Heated Oxygen Sensor Heater Low Control Bank 1 Sensor 2 | II | — |
| 54 - 58 | — | — | — | Not Occupied | — | — |
| 59 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | II | — |
| 60 - 65 | — | — | — | Not Occupied | — | — |
| 66 | 0.5 | WH/YE | 3121 | Heated Oxygen Sensor Low Signal Bank 1 Sensor 2 | II | — |
| 67 | 0.5 | VT/BU | 3120 | Heated Oxygen Sensor High Signal Bank 1 Sensor 2 | II | — |
| 68 - 69 | — | — | — | Not Occupied | — | — |
| 70 | 0.75 | WH/GY | 1876 | Knock Sensor Signal 2 | II | — |
| 71 | 0.75 | VT/GY | 496 | Knock Sensor Signal 1 | II | — |
| 72 | 0.5 | YE | 581 | Throttle Actuator Control Open | II | — |
| 73 | 2.5 | BK/WH | 451 | Signal Ground | I | — |

# K20 Engine Control Module X3 (LV3)



1590596

## Connector Part Information

Harness Type: Engine
OEM Connector: 15497996
Service Connector: 88988372
Description: 73-Way F 0.64, 2.8 Series, Sealed (BK with GY Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576376 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | A | 4 |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K20 Engine Control Module X3 (LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | VT/BN | 5284 | Camshaft Phaser Intake Solenoid 1 | II | — |
| 6 | 0.5 | VT/GN | 4320 | Selective Catalytic Reduction Power Module Wake-Up Signal | II | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | YE/VT | 5275 | Camshaft Position Intake Sensor 1 | II | — |
| 9 | 0.5 | GY/BU | 5300 | Camshaft Position Intake Sensor Control 1 | II | — |
| 10 | 0.5 | GN | 6271 | Crankshaft 60X Sensor Signal | II | — |
| 11 | 0.5 | VT/BU | 6091 | Crankshaft Position Sensor Replicated Signal | II | — |
| 12 | 0.5 | YE/BU | 2124 | Ignition Control 4 | II | — |
| 13 | 0.5 | BN/BU | 2126 | Ignition Control 6 | II | — |
| 14 | 0.5 | BN | 25 | Charge Indicator Control | II | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.75 | YE | 7301 | High Pressure Fuel Pump Actuator High - Control | II | — |
| 17 - 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.5 | BN/WH | 6354 | Output Speed High (Replicated TOS) Input Signal | II | — |
| 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | BK/BN | 6753 | Cam Phaser W Low Reference | II | — |

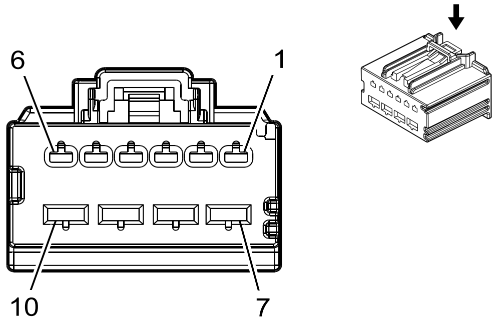
## K20 Engine Control Module X3 (LV3) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 22 - 23 | — | — | — | Not Occupied | — | — |
| 24 | 0.5 | BK/GN | 5301 | Camshaft Position Intake Sensor Low Reference 1 | II | — |
| 25 | 0.5 | VT/BU | 6270 | Crankshaft 60X Sensor 5V Reference | II | — |
| 26 | 0.5 | BK/VT | 6272 | Crankshaft 60X Sensor Low Reference | II | — |
| 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.5 | BU/GY | 2125 | Ignition Control 5 | II | — |
| 29 | 0.5 | BU/VT | 2121 | Ignition Control 1 | II | — |
| 30 | 0.5 | BK/BU | 2129 | Ignition Control Low Reference Bank 1 | II | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.75 | VT/BK | 7300 | High Pressure Fuel Pump Actuator Low - Control | II | — |
| 33 - 35 | — | — | — | Not Occupied | — | — |
| 36 | 0.5 | BK/BN | 2752 | Throttle Position Sensor Low Reference | II | — |
| 37 | 0.5 | BK/GN | 469 | Manifold Absolute Pressure Sensor Low Reference | II | — |
| 38 - 42 | — | — | — | Not Occupied | — | — |
| 43 | 0.5 | BK/GY | 626 | Engine Control Sensors Low Reference (3) | II | — |
| 44 | 0.75 | VT/BU | 5292 | Powertrain Main Relay Fused Supply 3 | II | — |
| 45 - 46 | — | — | — | Not Occupied | — | — |
| 47 | 0.75 | BU | 4802 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 | II | — |
| 48 | 0.75 | GN | 4803 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 3 | II | — |
| 49 | 0.75 | GY/BU | 4804 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 4 | II | — |
| 50 | 0.75 | WH/GN | 4805 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 5 | II | — |
| 51 | 0.75 | VT/GN | 4806 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 6 | II | — |
| 52 | 0.75 | BN | 4801 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 | II | — |
| 53 | 0.5 | BU | 5491 | Cylinder Shutoff Solenoid Control 1 | II | — |
| 54 | 0.5 | GN | 5492 | Cylinder Shutoff Solenoid Control 2 | II | — |
| 55 | 0.5 | BN/RD | 2701 | Throttle Position Sensor 5V Reference | II | — |
| 56 | 0.5 | BU/WH | 3630 | Throttle Position Sensor (SENT1) Signal | II | — |
| 57 | 0.5 | GY/RD | 2704 | Manifold Absolute Pressure Sensor 5V Reference | II | — |
| 58 | 0.5 | GN/WH | 432 | Manifold Absolute Pressure Sensor Signal | II | — |
| 59 | — | — | — | Not Occupied | — | — |
| 60 | 0.5 | BU/WH | 7446 | Fuel Line Pressure Sensor Signal | II | — |
| 61 | 0.5 | BU | 410 | Engine Coolant Temperature Sensor Signal | II | — |
| 62 | — | — | — | Not Occupied | — | — |
| 63 | 0.5 | BU/WH | 2918 | Fuel Rail Pressure Sensor Signal | II | — |
| 64 | 0.5 | GY | 23 | Generator Field Duty Cycle Signal | II | — |
| 65 - 66 | — | — | — | Not Occupied | — | — |
| 67 | 0.75 | BU/GY | 4902 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2 | II | — |

## K20 Engine Control Module X3 (LV3) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 68 | 0.75 | GN/GY | 4903 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3 | II | — |
| 69 | 0.75 | BU/WH | 4904 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4 | II | — |
| 70 | 0.75 | GN/WH | 4905 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5 | II | — |
| 71 | 0.75 | VT/GY | 4906 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6 | II | — |
| 72 | 0.75 | BN/WH | 4901 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 | II | — |
| 73 | 0.5 | BK/WH | 451 | Signal Ground | I | — |

# K29F Seat Heating Control Module - Front X1 (KA1)



3791446

## Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 31372-1000
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Series (BK)

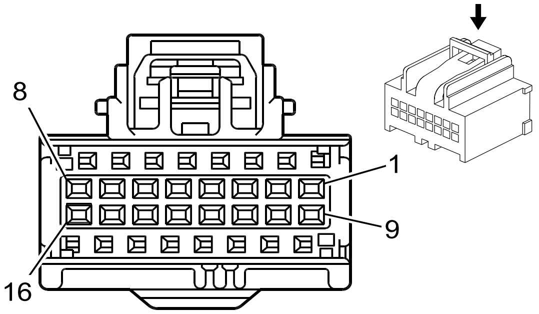
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K29F Seat Heating Control Module - Front X1 (KA1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | WH/BN | 2481 | Passenger Heated Back Element Control | I | — |
| 2 | 0.75 | BN/BU | 2479 | Passenger Heated Seat Element Control | I | — |
| 3 | 0.75 | GY/BK | 2480 | Passenger Heated Seat Element Low Reference | I | — |
| 4 | 0.75 | BN/BK | 2078 | Driver Heated Seat Element Low Reference | I | — |
| 5 | 0.75 | BN | 2432 | Driver Heated Back Element Control | I | — |
| 6 | 0.75 | BN/VT | 2077 | Driver Heated Seat Element Control | I | — |
| 7 | 0.75 | RD | 6140 | Battery Positive Voltage | II | — |
| 8 | 0.75 | BK | 1250 | Ground | II | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.75 | RD/GN | 5140 | Battery Positive Voltage | II | — |

# K29F Seat Heating Control Module - Front X2 (KA1)



1653409

## Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 15136073
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 Kaizen Series (BK)

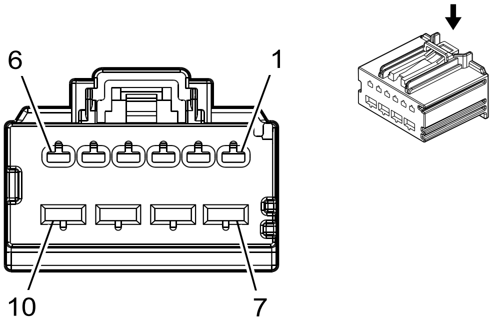
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K29F Seat Heating Control Module - Front X2 (KA1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/YE | 2080 | Driver Heated Seat NTC Low Reference | I | — |
| 2 | 0.5 | BK/GY | 2435 | Passenger Heated Seat NTC Low Reference | I | — |
| 3 | 0.5 | BU | 2425 | Driver Heated Back NTC Signal | I | — |
| 4 | 0.5 | WH/BU | 2436 | Passenger Heated Back NTC Signal | I | — |
| 5 | 0.5 | WH/GY | 2434 | Passenger Heated Seat NTC Signal | I | — |
| 6 | 0.5 | YE/GY | 2079 | Driver Heated Seat NTC Signal | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | GN/BU | 6133 | Local Interconnect Network Serial Data Bus 2 | I | — |
| 9 | 0.35 | GN/VT | 5906 | Driver Seat Vent Motor Control 1 | I | — |
| 10 | 0.5 | WH | 5908 | Passenger Seat Vent Motor Control 1 | I | — |
| 11 | 0.5 | BK/VT | 2426 | Driver Heated Back NTC Low Reference | I | — |
| 12 | 0.5 | BK/GN | 2482 | Passenger Heated Back NTC Low Reference | I | — |
| 13 - 16 | — | — | — | Not Occupied | — | — |

## K29F Seat Heating Control Module - Front X1 (KQV)



3791446

### Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 31372-1000
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Series (BK)

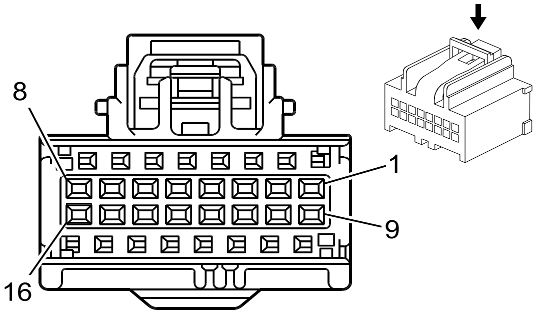
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### K29F Seat Heating Control Module - Front X1 (KQV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | WH/BN | 2481 | Passenger Heated Back Element Control | I | — |
| 2 | 0.75 | BN/BU | 2479 | Passenger Heated Seat Element Control | I | — |
| 3 | 0.75 | GY/BK | 2480 | Passenger Heated Seat Element Low Reference | I | — |
| 4 | 0.75 | BN/BK | 2078 | Driver Heated Seat Element Low Reference | I | — |
| 5 | 0.75 | BN | 2432 | Driver Heated Back Element Control | I | — |
| 6 | 0.75 | BN/VT | 2077 | Driver Heated Seat Element Control | I | — |
| 7 | 0.75 | RD | 6140 | Battery Positive Voltage | II | — |
| 8 | 0.75 | BK | 1250 | Ground | II | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.75 | RD/GN | 5140 | Battery Positive Voltage | II | — |

# K29F Seat Heating Control Module - Front X2 (KQV)



1653409

## Connector Part Information

Harness Type: Passenger Seat
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 Kaizen Series (BK)

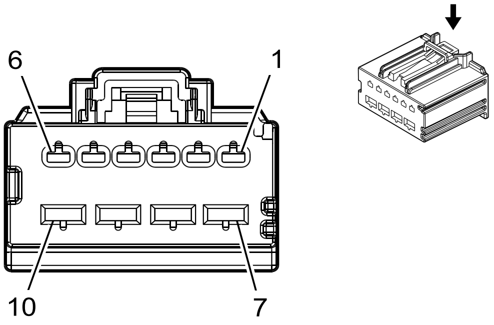
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K29F Seat Heating Control Module - Front X2 (KQV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/YE | 2080 | Driver Heated Seat NTC Low Reference | I | — |
| 2 | 0.5 | BK/GY | 2435 | Passenger Heated Seat NTC Low Reference | I | — |
| 3 | 0.5 | BU | 2425 | Driver Heated Back NTC Signal | I | — |
| 4 | 0.5 | WH/BU | 2436 | Passenger Heated Back NTC Signal | I | — |
| 5 | 0.5 | WH/GY | 2434 | Passenger Heated Seat NTC Signal | I | — |
| 6 | 0.5 | YE/GY | 2079 | Driver Heated Seat NTC Signal | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | GN/BU | 6133 | Local Interconnect Network Serial Data Bus 2 | I | — |
| 9 | 0.35 | GN/VT | 5906 | Driver Seat Vent Motor Control 1 | I | — |
| 10 | 0.5 | WH | 5908 | Passenger Seat Vent Motor Control 1 | I | — |
| 11 | 0.5 | BK/VT | 2426 | Driver Heated Back NTC Low Reference | I | — |
| 12 | 0.5 | BK/GN | 2482 | Passenger Heated Back NTC Low Reference | I | — |
| 13 - 16 | — | — | — | Not Occupied | — | — |

## K29R Seat Heating Control Module - Rear X1 (KA6)



3791446

### Connector Part Information

Harness Type: Rear Seat
OEM Connector: 31372-1000
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Series (BK)

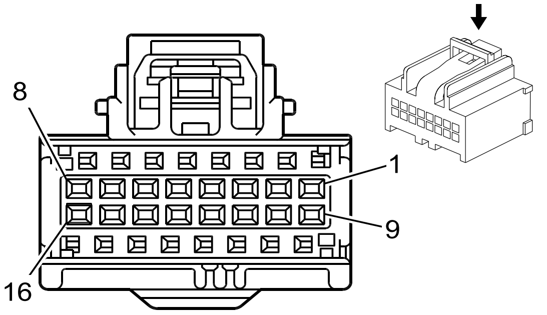
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### K29R Seat Heating Control Module - Rear X1 (KA6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.75 | GN/BN | 2296 | Right Rear Heated Seat Cushion Element Control | I | — |
| 3 | 0.75 | GN/BK | 2297 | Right Rear Heated Seat Cushion Element Low Reference | I | — |
| 4 | 0.75 | BN/BK | 2295 | Left Rear Heated Seat Cushion Element Low Reference | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.75 | GY | 2294 | Left Rear Heated Seat Cushion Element Control | I | — |
| 7 | 0.75 | RD/YE | 240 | Battery Positive Voltage | II | — |
| 8 | 1 | BK | 1150 | Ground | II | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.75 | RD/VT | 340 | Battery Positive Voltage | II | — |

# K29R Seat Heating Control Module - Rear X2 (KA6)



1653409

### Connector Part Information

Harness Type: Rear Seat
OEM Connector: 15136073
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 Kaizen Series (BK)

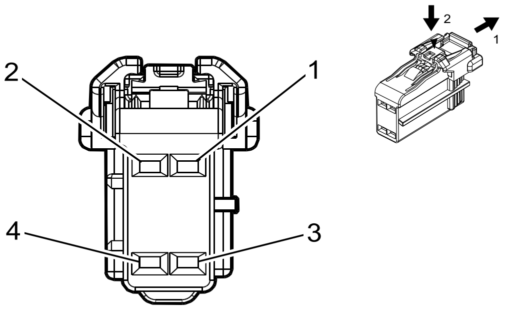
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### K29R Seat Heating Control Module - Rear X2 (KA6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU/WH | 7048 | Left Rear Cushion NTC Low Reference | I | — |
| 2 | 0.75 | WH/BK | 7054 | Right Rear Cushion NTC Low Reference | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.75 | YE/WH | 7053 | Right Rear Cushion NTC Signal | I | — |
| 6 | 0.75 | WH/BU | 7047 | Left Rear Cushion NTC Signal | I | — |
| 7 | 0.5 | BK | 1150 | Ground | I | — |
| 8 | 0.5 | GN/BU | 6133 | Local Interconnect Network Serial Data Bus 2 | I | — |
| 9 - 16 | — | — | — | Not Occupied | — | — |

# K32 Steering Wheel Heating Control Module X1 (UVD)



4115727

## Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13595574
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 Series (BK)

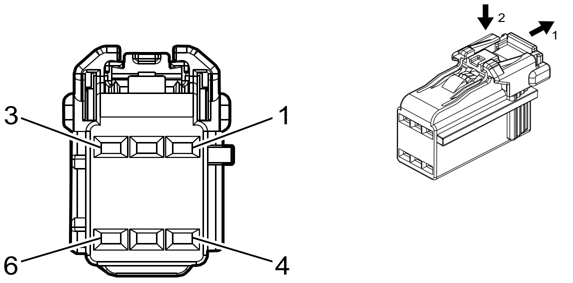
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K32 Steering Wheel Heating Control Module X1 (UVD)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GN | 5888 | Heated Steering Wheel High Control | I | — |
| 2 | — | BK | 1354 | Heated Steering Wheel Low Reference | I | — |
| 3 | — | BU | 5885 | Heated Steering Wheel Voltage Reference | I | — |
| 4 | — | GY | 5886 | Heated Steering Wheel Sensor Signal | I | — |

## K32 Steering Wheel Heating Control Module X2 (UVD)



4862126

### Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13588647
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.2 Series (BK)

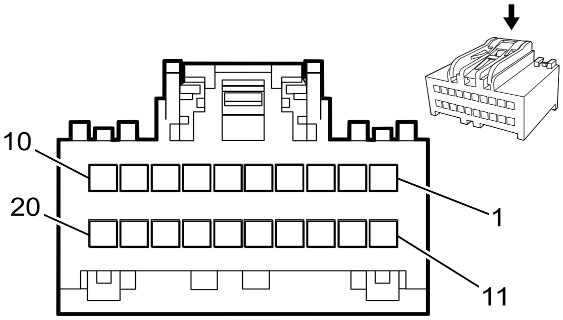
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### K32 Steering Wheel Heating Control Module X2 (UVD)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GN | 5883 | Heated Steering Wheel Switch Signal | I | — |
| 2 | — | GY/OG | 5884 | Heated Steering Wheel Switch LED Control | I | — |
| 3 | — | OG | 1139 | Run/Crank Ignition 1 Voltage | I | — |
| 4 | — | BK | 1850 | Ground | I | — |
| 5 | — | BK | 1850 | Ground | I | — |
| 6 | — | WH | 4119 | Local Interconnect Network Serial Data Bus 19 | I | — |

# K33 HVAC Control Module X1



2180227

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13950637
Service Connector: 13593934
Description: 20-Way F 0.64 Series (GN)

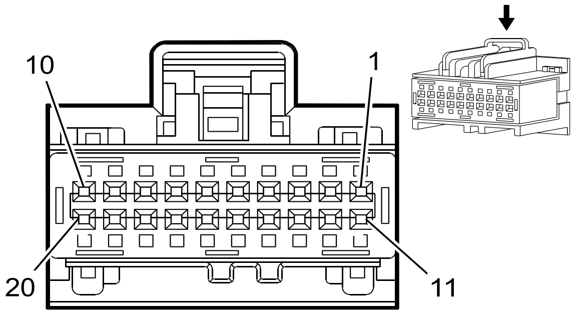
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300631 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K33 HVAC Control Module X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.35 | GY/GN | 7565 | Windscreen Temp Sensor Signal | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.35 | BU/WH | 734 | Inside Air Temperature Sensor Signal | I | — |
| 5 | 0.35 | YE/BU | 3197 | Humidity Temperature Sensor Signal | I | — |
| 6 | 0.35 | YE/RD | 597 | 5V Reference | I | — |
| 7 | 0.35 | BK/BU | 7566 | Humidity/Windscreen Temp Sensor Low Reference | I | — |
| 8 - 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.35 | GY/BU | 7564 | Humidity Sensor Signal | I | — |
| 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.35 | GY | 590 | Solar Sensor Driver Signal | I | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.35 | BK | 1050 | Ground | I | — |
| 17 - 20 | — | — | — | Not Occupied | — | — |

# K33 HVAC Control Module X2



1664552

### Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13950640
Service Connector: 15126709
Description: 20-Way F USCAR 64 Series (BN)

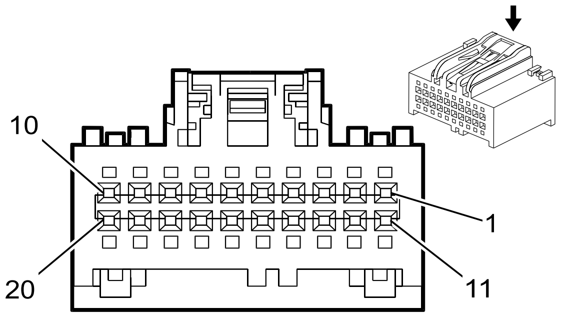
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300631 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K33 HVAC Control Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD/VT | 3340 | Battery Positive Voltage | I | — |
| 2 | 0.35 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.35 | GN/YE | 7531 | Local Interconnect Network Serial Data Bus 9 | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | GN/BU | 4119 | Local Interconnect Network Serial Data Bus 19 | I | — |
| 7 | 0.35 | VT | 3195 | Auxiliary Heater Control | I | — |
| 8 | 0.35 | BK | 1050 | Ground | I | — |
| 9 | 0.35 | VT/BN | 300 | Run Ignition 3 Voltage | I | — |
| 10 | 0.35 | BU/YE | 7574 | Electric Variable Displacement Control | I | — |
| 11 | 0.35 | BU/BN | 7573 | Electric Variable Displacement Supply | I | — |
| 12 - 14 | — | — | — | Not Occupied | — | — |
| 15 | 0.35 | BU/GY | 754 | Blower Motor Speed Control | I | — |
| 16 - 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.35 | BK/GN | 7567 | Solar Sensor Low Reference | I | — |
| 19 | 0.5 | BN/VT | 193 | Rear Defog Relay Control | I | — |
| 20 | — | — | — | Not Occupied | — | — |

# K33 HVAC Control Module X3



1715223

## Connector Part Information

Harness Type: HVAC
OEM Connector: 13593931
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F 64 Series, Sealed (BK)

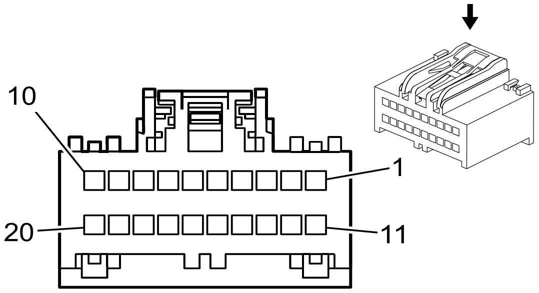
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K33 HVAC Control Module X3

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | — | GY | 3165 | Mode Door Stepper Motor Control 1 | I | — |
| 3 | — | BN/GN | 3166 | Mode Door Stepper Motor Control 2 | I | — |
| 4 | — | BU/BN | 3167 | Mode Door Stepper Motor Control 3 | I | — |
| 5 | — | GY/ | 3168 | Mode Door Stepper Motor Control 4 | I | — |
| 6 - 8 | — | — | — | Not Occupied | — | — |
| 9 | — | BK/YE | 1791 | Air Temperature Door Control Low Reference | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | — | BN/VT | 3169 | Temp Door Stepper Motor Control 1 | I | — |
| 12 | — | BN/WH | 3170 | Temp Door Stepper Motor Control 2 | I | — |
| 13 | — | BN/WH | 3171 | Temp Door Stepper Motor Control 3 | I | — |
| 14 | — | WH | 3172 | Temp Door Stepper Motor Control 4 | I | — |
| 15 | — | WH/BK | 7572 | HVAC Motor Control | I | — |
| 16 | — | WH/BK | 3173 | Air Inlet Door Stepper Motor Control 1 | I | — |
| 17 | — | VT/GN | 3174 | Air Inlet Door Stepper Motor Control 2 | I | — |
| 18 | — | YE/GN | 3175 | Air Inlet Door Stepper Motor Control 3 | I | — |
| 19 | — | YE | 3176 | Air Inlet Door Stepper Motor Control 4 | I | — |
| 20 | — | BN | 6137 | EVAP Core Temperature Sensor Signal | I | — |

# K33 HVAC Control Module X4



1715228

## Connector Part Information

Harness Type: HVAC
OEM Connector: 13593932
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F USCAR 64 Series (GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K33 HVAC Control Module X4

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 4 | — | — | — | Not Occupied | — | — |
| 5 | — | GY | 3181 | Temp Door Stepper Motor Passenger Control 1 | I | — |
| 6 | — | BN/GN | 3182 | Temp Door Stepper Motor Passenger Control 2 | I | — |
| 7 | — | BN | 3183 | Temp Door Stepper Motor Passenger Control 3 | I | — |
| 8 | — | VT/GN | 3184 | Temp Door Stepper Motor Passenger Control 4 | I | CJ2 |
| 9 - 20 | — | — | — | Not Occupied | — | — |

# K34 Glow Plug Control Module X1 (LM2)

—

## Connector Part Information

Harness Type: Glow Plug
OEM Connector: 12639355
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

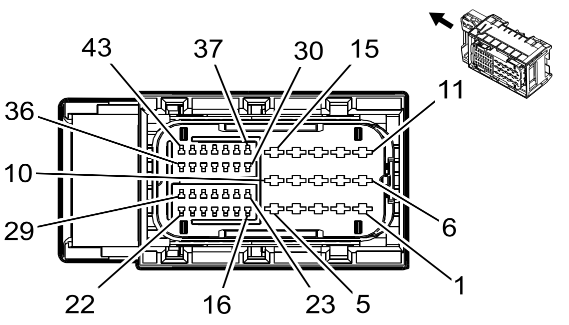
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### K34 Glow Plug Control Module X1 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | RD/VT | 842 | Battery Positive Voltage | I | — |

# K34 Glow Plug Control Module X2 (LM2)



3553744

## Connector Part Information

Harness Type: Engine
OEM Connector: 13699580
Service Connector: 13576417
Description: 43-Way F 1.2, 2.8 Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576372 | J-35616-4A (PU) | J-38125-556 | Not Available | Not Available | Not Available | Not Available |
| II | 19371215 | J-35616-16 (LT GN) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |

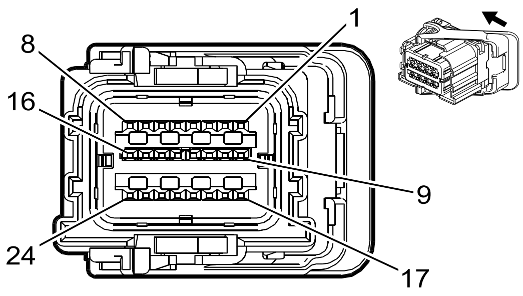
## K34 Glow Plug Control Module X2 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 2.5 | GY/YE | 1584 | Glow Plug Control 4 | I | — |
| 3 | 2.5 | GY/GN | 1583 | Glow Plug Control 3 | I | — |
| 4 | 2.5 | GY/BN | 1582 | Glow Plug Control 2 | I | — |
| 5 | 2.5 | GY/BU | 1581 | Glow Plug Control 1 | I | — |
| 6 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 2.5 | BK/WH | 4451 | — | I | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 2.5 | GY/WH | 1585 | Glow Plug Control 5 | I | — |
| 13 | 2.5 | GY/VT | 1586 | Glow Plug Control 6 | I | — |
| 14 - 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | II | — |
| 19 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | II | — |
| 20 - 24 | — | — | — | Not Occupied | — | — |
| 25 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | — |
| 26 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | — |
| 27 - 32 | — | — | — | Not Occupied | — | — |
| 33 | 0.5 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| 34 - 39 | — | — | — | Not Occupied | — | — |

## K34 Glow Plug Control Module X2 (LM2) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 40 | 0.35 | VT/YE | 43 | Accessory Ignition Voltage | II | — |
| 41 - 43 | — | — | — | Not Occupied | — | — |

## K36 Inflatable Restraint Sensing and Diagnostic Module X1



3240106

### Connector Part Information

Harness Type: Body
OEM Connector: 13887360
Service Connector: 19328755
Description: 24-Way F 0.64 Series, Sealed (YE)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19328872 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19368490 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

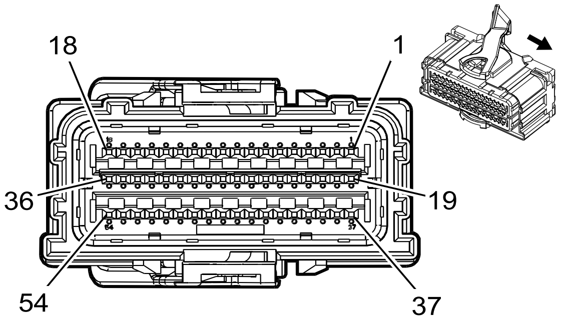
### K36 Inflatable Restraint Sensing and Diagnostic Module X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | OG/GN | 3023 | Steering Wheel Module Stage 2 High Control | I | — |
| 2 | 0.35 | WH/OG | 3022 | Steering Wheel Module Stage 2 Low Control | I | — |
| 3 | 0.35 | BN/OG | 3020 | Steering Wheel Module Stage 1 Low Control | I | — |
| 4 | 0.35 | OG/VT | 3021 | Steering Wheel Module Stage 1 High Control | I | — |
| 5 | 0.35 | YE/OG | 3025 | Passenger IP Module Stage 1 High Control | I | — |
| 6 | 0.35 | OG/WH | 3024 | Passenger IP Module Stage 1 Low Control | I | — |
| 7 | 0.35 | OG/VT | 3026 | Passenger IP Module Stage 2 Low Control | I | — |
| 8 | 0.35 | GY/OG | 3027 | Passenger IP Module Stage 2 High Control | I | — |
| 9 | 0.5 | RD/GN | 4440 | Battery Positive Voltage | II | — |
| 10 | 0.35 | VT/WH | 5234 | Passenger Seat Belt Indicator Control | I | — |
| 11 | 0.35 | BU | 2307 | Passenger Air Bag On Indicator Control | I | — |
| 12 | 0.35 | GN | 2308 | Passenger Air Bag Off Indicator Control | I | — |
| 13 | 0.5 | BU/WH | 3119 | Roof Rail Air Bag Defeat Switch Signal | II | — |
| 14 | 0.5 | BN/WH | 3895 | Roof Rail Air Bag Defeat Switch Low Reference | II | — |
| 15 | 0.35 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.35 | WH/BU | 5986 | Serial Data Communication Enable | I | — |
| 18 | 0.5 | BU/YE | 6105 | High Speed GMLAN Serial Data (+) 2 | II | — |
| 19 | 0.75 | BK/WH | 2551 | Signal Ground | II | — |

## K36 Inflatable Restraint Sensing and Diagnostic Module X1 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 20 | 0.5 | WH | 6106 | High Speed GMLAN Serial Data (-) 2 | II | — |
| 21 - 24 | — | — | — | Not Occupied | — | — |

# K36 Inflatable Restraint Sensing and Diagnostic Module X2



2817420

## Connector Part Information

Harness Type: Body
OEM Connector: 13944372
Service Connector: 19303770
Description: 54-Way F 0.64 Series, Sealed (YE)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19328872 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19368490 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

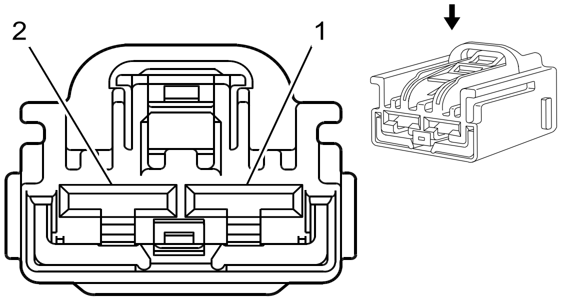
## K36 Inflatable Restraint Sensing and Diagnostic Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.5 | OG/YE | 3481 | Driver Seat Belt Anchor Pretensioner High Control | III | — |
| 10 | 0.5 | YE/OG | 3482 | Driver Seat Belt Anchor Pretensioner Low Control | III | — |
| 11 | 0.5 | GY/OG | 3480 | Passenger Seat Belt Anchor Pretensioner Low Control | III | — |
| 12 | 0.5 | OG/BN | 3479 | Passenger Seat Belt Anchor Pretensioner High Control | III | — |
| 13 | 0.5 | OG/BU | 3068 | Driver Side Impact Module High Control | II | — |
| 14 | 0.5 | GN/OG | 3069 | Driver Side Impact Module Low Control | II | — |
| 15 | 0.35 | BN/OG | 3067 | Passenger Side Impact Module Low Control | I | — |
| 16 | 0.35 | OG/GY | 3066 | Passenger Side Impact Module High Control | I | — |
| 17 | 0.5 | OG/GN | 5019 | Left Front Head Curtain Module High Control | III | — |
| 18 | 0.5 | VT/OG | 5020 | Left Front Head Curtain Module Low Control | III | — |
| 19 | 0.35 | OG/GN | 2132 | Left Front Side Impact Sensing Module Signal | I | — |
| 20 | 0.35 | BK/OG | 6628 | Left Front Side Impact Sensing Module Low Reference | I | — |

## K36 Inflatable Restraint Sensing and Diagnostic Module X2 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 21 | 0.35 | BK/OG | 6629 | Right Front Side Impact Sensing Module Low Reference | I | — |
| 22 | 0.35 | BN/OG | 2134 | Right Front Side Impact Sensing Module Signal | I | — |
| 23 | 0.5 | OG/YE | 354 | Left Front Discriminating Sensor Signal | II | — |
| 24 | 0.5 | BK/OG | 5045 | Left Front Discriminating Sensor Low Reference | II | — |
| 25 | 0.5 | BK/OG | 5600 | Right Front Discriminating Sensor Low Reference | II | — |
| 26 | 0.5 | OG/GN | 1409 | Right Front Discriminating Sensor Signal | II | — |
| 27 | 0.35 | OG/BU | 6622 | Left Rear Side Impact Sensing Module Signal | I | — |
| 28 | 0.35 | BK/OG | 6623 | Left Rear Side Impact Sensing Module Low Reference | I | — |
| 29 | 0.35 | BK/OG | 6627 | Right Rear Side Impact Sensing Module Low Reference | I | — |
| 30 | 0.35 | OG/WH | 6626 | Right Rear Side Impact Sensing Module Signal | I | — |
| 31 - 36 | — | — | — | Not Occupied | — | — |
| 37 | 0.5 | OG/WH | 3477 | Driver Seat Belt Retractor Pretensioner High Control | III | — |
| 38 | 0.5 | GY/OG | 3478 | Driver Seat Belt Retractor Pretensioner Low Control | III | — |
| 39 | 0.35 | WH/OG | 3476 | Passenger Seat Belt Retractor Pretensioner Low Control | III | — |
| 40 | 0.35 | OG/GN | 3475 | Passenger Seat Belt Retractor Pretensioner High Control | III | — |
| 41 | 0.35 | OG/BN | 238 | Driver Seat Belt Switch Signal | I | — |
| 42 | — | — | — | Not Occupied | — | — |
| 43 | 0.35 | BK/OG | 1363 | Driver Seat Belt Switch Low Reference | I | — |
| 44 | 0.35 | BK/OG | 1361 | Passenger Seat Belt Switch Low Reference | I | — |
| 45 | 0.35 | OG/VT | 1362 | Passenger Seat Belt Switch Signal | I | — |
| 46 - 52 | — | — | — | Not Occupied | — | — |
| 53 | 0.5 | OG/GY | 5021 | Right Front Head Curtain Module High Control | III | — |
| 54 | 0.5 | WH/OG | 5022 | Right Front Head Curtain Module Low Control | III | — |

# K40 Seat Memory Control Module X1 (A45)



## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 7283-6458-40
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 6.3 Series (L-GY)

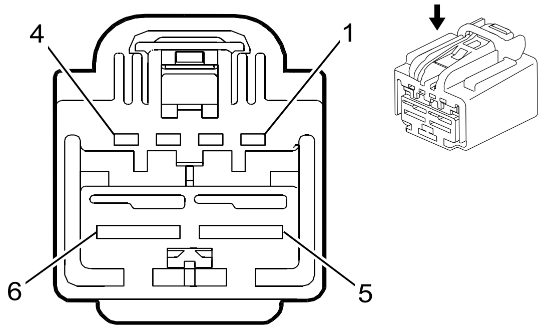
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-42 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K40 Seat Memory Control Module X1 (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD/BN | 1140 | Battery Positive Voltage | I | — |
| 2 | 2.5 | RD/YE | 5040 | Battery Positive Voltage | I | — |

# K40 Seat Memory Control Module X2 (A45)



1798802

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 7283-9749-30
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F YESC Kaizen Series (BK)

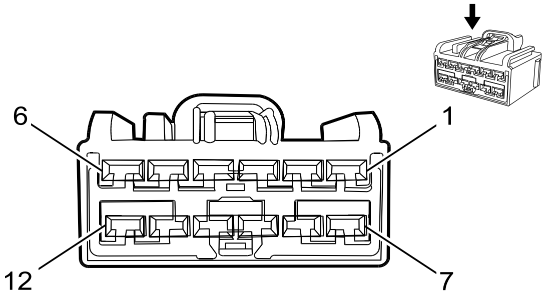
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-42 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K40 Seat Memory Control Module X2 (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | GN/WH | 7530 | Local Interconnect Network Serial Data Bus 8 | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 2.5 | BK | 1150 | Ground | II | — |
| 6 | — | — | — | Not Occupied | — | — |

# K40 Seat Memory Control Module X3 (A45)



2231648

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 7283-6467-40
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F 2.8 Kaizen Series (L-GY)

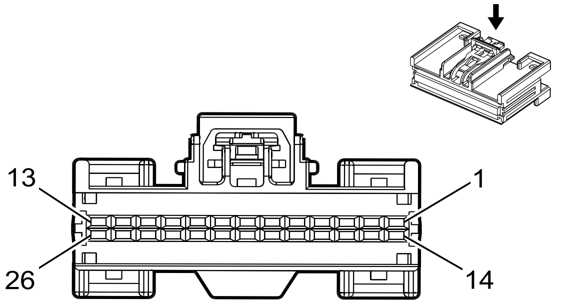
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K40 Seat Memory Control Module X3 (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN/YE | 276 | Driver Power Seat Recline Motor Forward Control | I | — |
| 2 | 1.5 | BU/YE | 277 | Driver Power Seat Recline Motor Rearward Control | I | — |
| 3 | 1.5 | GN/BN | 286 | Driver Power Seat Front Vertical Motor Up Control | I | — |
| 4 | 1.5 | BU/VT | 287 | Driver Power Seat Front Vertical Motor Down Control | I | — |
| 5 | 1.5 | YE | 282 | Driver Power Seat Rear Vertical Motor Up Control | I | — |
| 6 | 1.5 | GY/BU | 283 | Driver Power Seat Rear Vertical Motor Down Control | I | — |
| 7 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 1.5 | YE/BU | 285 | Driver Power Seat Horizontal Motor Forward Control | I | — |
| 12 | 1.5 | GY/GN | 284 | Driver Power Seat Horizontal Motor Rearward Control | I | — |

# K40 Seat Memory Control Module X5 (A45)



2916473

### Connector Part Information

Harness Type: Driver Seat
OEM Connector: 7287-2043-30
Service Connector: Service by Harness - See Part Catalog
Description: 26-Way F 0.64 Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

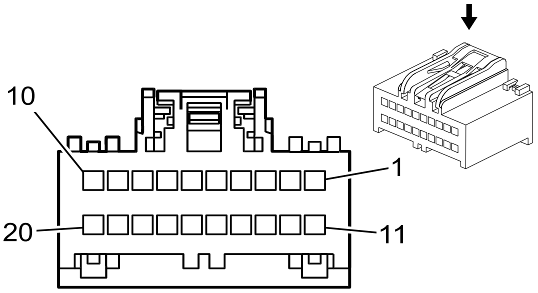
## K40 Seat Memory Control Module X5 (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/RD | 3298 | Memory Sensor High Reference 2 | I | — |
| 2 - 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | BN | 3038 | Right Rear Haptic Seat Motor Control | I | — |
| 5 | 0.5 | YE/BN | 3037 | Left Rear Haptic Seat Motor Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | YE/BN | 1522 | Power Seat Horizontal Forward Switch Signal | I | — |
| 8 | 0.5 | GY/GN | 1523 | Power Seat Horizontal Rearward Switch Signal | I | — |
| 9 | 0.5 | GN/BN | 1518 | Power Seat Front Vertical Up Switch Signal | I | — |
| 10 | 0.5 | BU/VT | 1520 | Power Seat Front Vertical Down Switch Signal | I | — |
| 11 | 0.5 | GN | 569 | Memory Seat Horizontal Motor Position Sensor Signal | I | — |
| 12 | 0.5 | BN/WH | 557 | Memory Seat Front Vertical Motor Position Sensor Signal | I | — |
| 13 - 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.5 | YE | 1519 | Power Seat Rear Vertical Up Switch Signal | I | — |
| 20 | 0.5 | YE/BU | 1521 | Power Seat Rear Vertical Down Switch Signal | I | — |
| 21 | 0.5 | GY/BK | 1269 | Power Seat Recline Forward Switch Signal | I | — |
| 22 | 0.5 | GN/GY | 1270 | Power Seat Recline Rearward Switch Signal | I | — |
| 23 - 24 | — | — | — | Not Occupied | — | — |
| 25 | 0.5 | YE/BU | 568 | Memory Seat Rear Vertical Motor Position Sensor Signal | I | — |

## K40 Seat Memory Control Module X5 (A45) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 26 | 0.5 | WH/BK | 570 | Driver Memory Seat Recline Motor Position Sensor Signal | I | — |

# K40 Seat Memory Control Module X6 (A45)



1715228

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 31410-0201
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F USCAR 64 Series (GY)

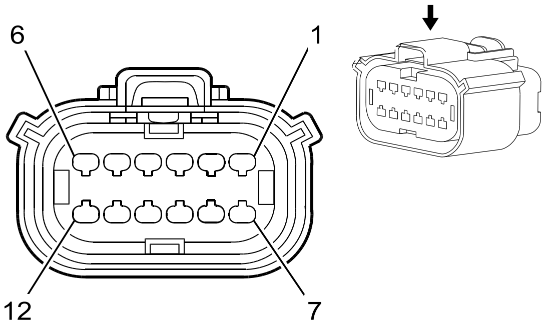
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K40 Seat Memory Control Module X6 (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.5 | BK/BU | 5978 | Memory Switch Low Reference | I | — |
| 12 | 0.5 | WH | 615 | Memory Seat Switch Signal 1 | I | — |
| 13 - 14 | — | — | — | Not Occupied | — | — |
| 15 | 0.5 | BU/GN | 614 | Memory Seat Switch Set Signal | I | — |
| 16 - 20 | — | — | — | Not Occupied | — | — |

# K43 Power Steering Control Module X1



1825165

## Connector Part Information

Harness Type: Power Steering Jumper
OEM Connector: 19178148
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F 1.5 Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K43 Power Steering Control Module X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | — | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | I | — |
| 3 | — | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | I | — |
| 4 | — | BU/YE | 6105 | High Speed GMLAN Serial Data (+) 2 | I | — |
| 5 | — | WH | 6106 | High Speed GMLAN Serial Data (-) 2 | I | — |
| 6 - 7 | — | — | — | Not Occupied | — | — |
| 8 | — | WH/BU | 5986 | Serial Data Communication Enable | I | — |
| 9 | — | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | I | — |
| 10 | — | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | I | — |
| 11 | — | BU/YE | 6105 | High Speed GMLAN Serial Data (+) 2 | I | — |
| 12 | — | WH | 6106 | High Speed GMLAN Serial Data (-) 2 | I | — |

# K43 Power Steering Control Module X2

—

## Connector Part Information

Harness Type: Power Steering Jumper
OEM Connector: 13508902
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

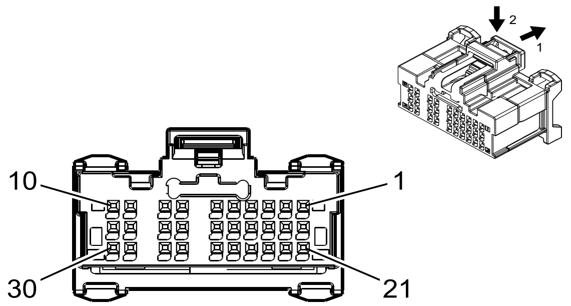
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### K43 Power Steering Control Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | RD/VT | 3542 | Battery Positive Voltage | I | — |
| 2 | — | BK | 350 | Ground | I | — |

# K56 Serial Data Gateway Module X1



4900333

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35077574
Service Connector: 13519319
Description: 30-Way F 0.5 MQS Series (GY)

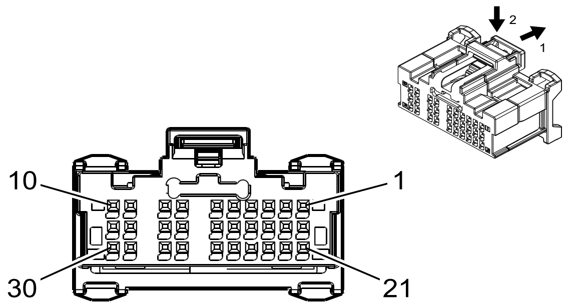
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K56 Serial Data Gateway Module X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD/VT | 3340 | Battery Positive Voltage | I | — |
| 2 - 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.35 | BU/GY | 3935 | High Speed GMLAN Serial Data (+) 8 | I | — |
| 5 | 0.35 | WH/GY | 3936 | High Speed GMLAN Serial Data (-) 8 | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35 | BK/WH | 1851 | Signal Ground | I | — |
| 8 | 0.35 | BU/GN | 1304 | High Speed GMLAN Serial Data (+)9 | I | — |
| 9 | 0.35 | WH/GN | 1305 | High Speed GMLAN Serial Data (-)9 | I | — |
| 10 - 12 | — | — | — | Not Occupied | — | — |
| 13 | 0.35 | BU/WH | 2089 | High Speed GMLAN Serial Data (+)(13) | I | — |
| 14 | 0.35 | WH | 2090 | High Speed GMLAN Serial Data (-)(13) | I | — |
| 15 | 0.35 | BU/BK | 1978 | High Speed GMLAN Serial Data (+)(11) | I | — |
| 16 | 0.35 | WH | 1979 | High Speed GMLAN Serial Data (-)(11) | I | — |
| 17 | 0.35 | BU/BN | 1980 | High Speed GMLAN Serial Data (+)(12) | I | — |
| 18 | 0.35 | WH | 1981 | High Speed GMLAN Serial Data (-)(12) | I | — |
| 19 | — | — | — | Not Occupied | — | — |
| 20 | 0.35 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 21 - 25 | — | — | — | Not Occupied | — | — |
| 26 | 0.35 | GN/WH | 2100 | Low Speed GMLAN Serial Data #3 | I | — |
| 27 - 29 | — | — | — | Not Occupied | — | — |
| 30 | 0.35 | GY/GN | 1102 | Low Speed GMLAN Serial Data #2 | I | — |

# K56 Serial Data Gateway Module X2



4897967

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35074169
Service Connector: 13519320
Description: 30-Way F 0.5 MQS Series (BU)

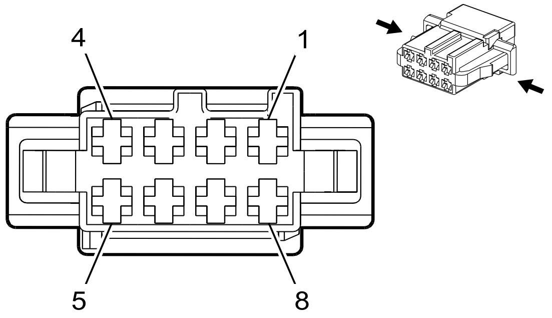
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19370262 | EL-35616-58 (BK) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K56 Serial Data Gateway Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.35 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | I | — |
| 5 | 0.35 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | I | — |
| 6 | 0.35 | BU/GY | 3935 | High Speed GMLAN Serial Data (+) 8 | I | — |
| 7 | 0.35 | WH/GY | 3936 | High Speed GMLAN Serial Data (-) 8 | I | — |
| 8 | 0.35 | BU/YE | 6105 | High Speed GMLAN Serial Data (+) 2 | I | — |
| 9 | 0.35 | WH | 6106 | High Speed GMLAN Serial Data (-) 2 | I | — |
| 10 | 0.35 | BU/GN | 1304 | High Speed GMLAN Serial Data (+)9 | I | — |
| 11 - 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.35 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | I | — |
| 15 | 0.35 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | I | — |
| 16 | 0.35 | BU/GY | 3935 | High Speed GMLAN Serial Data (+) 8 | I | — |
| 17 | 0.35 | WH/GY | 3936 | High Speed GMLAN Serial Data (-) 8 | I | — |
| 18 | 0.35 | BU/YE | 6105 | High Speed GMLAN Serial Data (+) 2 | I | — |
| 19 | 0.35 | WH | 6106 | High Speed GMLAN Serial Data (-) 2 | I | — |
| 20 | 0.35 | WH/GN | 1305 | High Speed GMLAN Serial Data (-)9 | I | — |
| 21 - 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.35 | VT/BK | 1639 | Run/Crank Ignition 1 Voltage | I | — |
| 24 | — | — | — | Not Occupied | — | — |
| 25 | 0.35 | WH/BU | 5986 | Serial Data Communication Enable | I | — |
| 26 - 30 | — | — | — | Not Occupied | — | — |

# K60 Steering Column Lock Module (BTM)



2173871

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10718780
Service Connector: 13576545
Description: 8-Way F 1.6 Micro-Timer Series (BK)

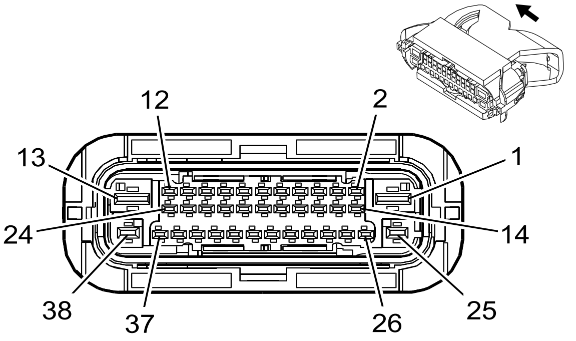
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K60 Steering Column Lock Module (BTM)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.35 | BU/VT | 5904 | Steering Column Lock Status Signal | I | — |
| 3 | 0.35 | BU/VT | 807 | OFF /Accessory Ignition Voltage | I | — |
| 4 | 0.35 | GN/VT | 1601 | Steering Column Lock Signal | I | — |
| 5 | 0.5 | RD/GY | 4140 | Battery Positive Voltage | I | — |
| 6 | 0.35 | BK | 1850 | Ground | I | — |
| 7 | 0.35 | BK/WH | 1851 | Signal Ground | I | — |
| 8 | 0.35 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |

# K68 Trailer Lighting Control Module (U1D)



5141918

## Connector Part Information

- Harness Type: Chassis
- OEM Connector: 13670757
- Service Connector: 19371190
- Description: 38-Way F 1.5, 2.8, 4.8 MCP Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576374 | J-35616-35 (VT) | J-38125-557 | 1-968857-3 | Lear 7 | C | 1 |
| II | 19301757 | J-35616-40 (BU) | J-38125-556 | 1241408-1 | Lear 28 | A | B |
| III | 19301776 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

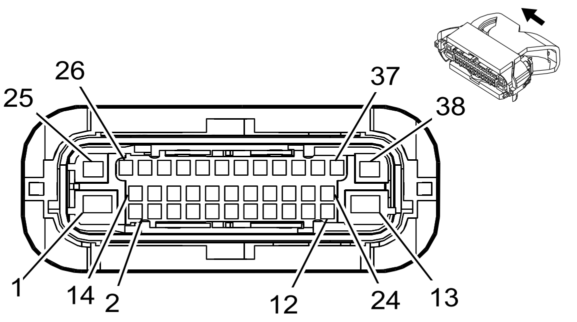
## K68 Trailer Lighting Control Module (U1D)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2 | RD/YE | 5840 | Battery Positive Voltage | II | — |
| 2 | 0.75 | YE/GY | 1618 | Left Rear Trailer Stop/Turn Lamp Control | III | — |
| 3 | 0.75 | GN/VT | 1619 | Right Rear Trailer Stop/Turn Lamp Control | III | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.75 | GY/BN | 2109 | Trailer Park Lamp Control | III | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.75 | GN/WH | 5189 | Trailer Backup Lamp Control | III | — |
| 8 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.5 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | III | — |
| 11 | 0.5 | VT/WH | 5065 | Stop Lamp Relay Coil Control | III | — |
| 12 | — | — | — | Not Occupied | — | — |
| 13 | 2.5 | BK | 1750 | Ground | II | — |
| 14 - 24 | — | — | — | Not Occupied | — | — |
| 25 | 2 | RD/BN | 7601 | Trailer Battery Charge Control | I | — |
| 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.5 | GN | 5060 | Low Speed GMLAN Serial Data | III | — |
| 28 - 37 | — | — | — | Not Occupied | — | — |

## K68 Trailer Lighting Control Module (U1D) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 38 | 2 | RD/VT | 5640 | Battery Positive Voltage | I | — |

# K69 Transfer Case Control Module (NP0/NQH)



3240112

## Connector Part Information

Harness Type: Engine
OEM Connector: 33110415
Service Connector: 19353395
Description: 38-Way F 1.5 CTS, 2.8 MCP, 4.8 MCP Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576374 | J-35616-35 (VT) | J-38125-557 | 1-968857-3 | Lear 7 | C | 1 |
| II | 13582180 | J-35616-14 (GN) | J-38125-557 | 1241374-1 | Lear 17 | E | 2 |
| III | 19301757 | J-35616-40 (BU) | J-38125-556 | 1241408-1 | Lear 28 | B | G |
| IV | 19301776 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| V | 19333088 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

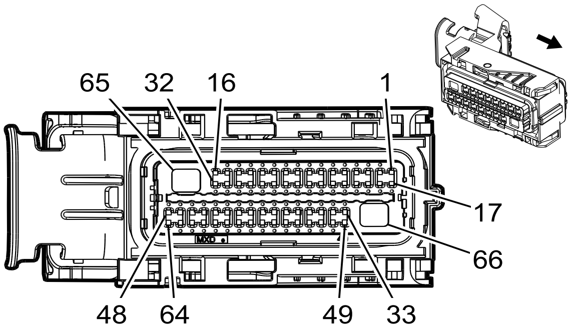
## K69 Transfer Case Control Module (NP0/NQH)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 3 | RD/GY | 1342 | Battery Positive Voltage | III | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | IV | NQH |
| 4 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | IV | NQH |
| 5 | 0.5 | WH/GN | 7479 | Rotary Position Sensor Signal | IV | NQH |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | YE | 7474 | Incremental Encoder Direction Signal | IV | NQH |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.5 | YE/WH | 1695 | Four Wheel Drive Wheel Lock Indicator Control | II | NQH |
| 10 | 0.5 | BN | 1560 | Neutral Indicator Control | II | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | GY/BK | 1570 | Front Axle Actuator Control | IV | NQH |
| 13 | 3 | YE/VT | 1553 | Transfer Case Motor Counter Clockwise Control | III | NQH |
| 14 | — | — | — | Not Occupied | — | — |

## K69 Transfer Case Control Module (NP0/NQH) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 15 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | NQH |
| 16 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | IV | NQH |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.5 | WH/BU | 5986 | Serial Data Communication Enable | II | NQH |
| 19 | 0.5 | BU/GY | 7473 | Incremental Encoder Impulse Signal | IV | NQH |
| 20 | 0.5 | WH/RD | 7477 | Rotary Position Sensor 5V Reference | IV | NQH |
| 21 - 23 | — | — | — | Not Occupied | — | — |
| 24 | 0.5 | GN | 953 | Transfer Case Motor Shield | IV | NQH |
| 25 | 2.5 | BK | 4450 | Ground | V | NQH |
| 26 | — | — | — | Not Occupied | — | — |
| 27 | 0.5 | GN | 951 | Knock Sensor Shield | IV | NQH |
| 28 - 29 | — | — | — | Not Occupied | — | — |
| 30 | 0.5 | YE/BK | 7478 | Rotary Position Sensor Low Reference | II | NQH |
| 31 | 0.5 | WH/GN | 7475 | Incremental Encoder Sensor 8V Reference | II | NQH |
| 32 | — | — | — | Not Occupied | — | — |
| 33 | 0.75 | BK | 952 | Transfer Case Lock Solenoid 12V Reference | II | NQH |
| 34 | 0.75 | YE/BN | 1569 | Transfer Case Lock Solenoid Control | II | NQH |
| 35 | — | — | — | Not Occupied | — | — |
| 36 | 0.5 | VT | 7476 | Incremental Encoder Sensor Low Reference | II | NQH |
| 37 | — | — | — | Not Occupied | — | — |
| 38 | 2.5 | YE/GY | 1552 | Transfer Case Motor Clockwise Control | I | NQH |

# K71 Transmission Control Module (MQB)



4024881

## Connector Part Information

Harness Type: Engine
OEM Connector: 33344977
Service Connector: 19330900
Description: 66-Way F 0.64, 2.8 Series, Sealed (BK with BK Terminal Position Assurance)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13579770 | J-35616-4A (PU) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

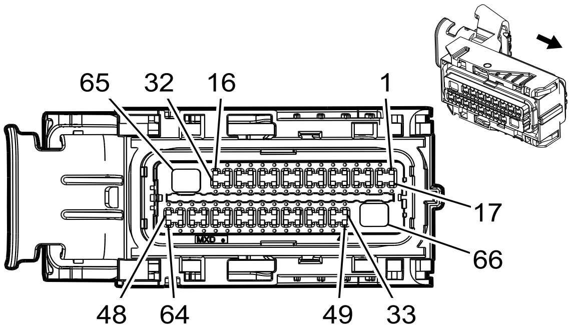
## K71 Transmission Control Module (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/WH | 422 | Torque Converter Clutch Solenoid Control | II | — |
| 2 | 0.5 | GY/GN | 6403 | Clutch D Control | II | — |
| 3 | 0.5 | WH/BU | 4507 | Transmission Clutch H Control | II | — |
| 4 | 0.5 | WH | 4508 | Transmission Clutch G Control | II | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | YE/GN | 4170 | Transmission Position Sensor B 9V Reference | II | — |
| 8 | 0.5 | YE/BU | 4171 | Transmission Position Sensor A 9V Reference | II | — |
| 9 - 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | GN/YE | 6353 | Input Speed Signal | II | — |
| 13 | 0.5 | GN/VT | 4510 | Transmission Intermediate Speed Signal | II | — |
| 14 | 0.5 | GY/BU | 6358 | Output Speed Signal | II | — |
| 15 | 0.5 | BN/WH | 6254 | Transmission Input Speed Sensor Signal | II | — |
| 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.5 | GN/WH | 1530 | Transmission Mainline Pressure Solenoid Control | II | — |
| 18 | 0.5 | YE/BN | 6404 | Clutch E Control | II | — |
| 19 | 0.5 | GY | 6402 | Clutch C Control | II | — |
| 20 | 0.5 | VT | 4509 | Transmission Clutch F Control | II | — |
| 21 | — | — | — | Not Occupied | — | — |

## K71 Transmission Control Module (MQB) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 22 | 0.5 | GN/BK | 7819 | Default Disable Solenoid Control | II | — |
| 23 | — | — | — | Not Occupied | — | — |
| 24 | 0.5 | GN/WH | 2968 | Transmission Auxiliary Oil Pump Control | II | — |
| 25 - 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.5 | BK/BN | 586 | Transmission Oil Temperature Sensor Low Reference | II | — |
| 29 - 32 | — | — | — | Not Occupied | — | — |
| 33 | 0.5 | GN/GY | 6387 | Transmission High Side Driver 1 Signal Driver | II | — |
| 34 | — | — | — | Not Occupied | — | — |
| 35 | 0.5 | VT/BK | 2139 | Run/Crank Ignition 1 Voltage | II | — |
| 36 | — | — | — | Not Occupied | — | — |
| 37 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | — |
| 38 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | II | — |
| 39 - 48 | — | — | — | Not Occupied | — | — |
| 49 | 0.5 | GY/BN | 6388 | Transmission High Side Driver 2 Signal | II | — |
| 50 | — | — | — | Not Occupied | — | — |
| 51 | 0.5 | VT/YE | 5985 | Accessory Wakeup Serial Data | II | — |
| 52 | — | — | — | Not Occupied | — | — |
| 53 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | — |
| 54 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | II | — |
| 55 - 62 | — | — | — | Not Occupied | — | — |
| 63 | 0.5 | BN/WH | 585 | Transmission Oil Temperature Sensor Signal | II | — |
| 64 | 0.5 | VT/BU | 5724 | Ignition Mode Switch Mode Control | II | — |
| 65 | 1.5 | BK/WH | 451 | Signal Ground | I | — |
| 66 | 1.5 | RD/GN | 1840 | Battery Positive Voltage | I | — |

## K71 Transmission Control Module (MQE)



4024881

### Connector Part Information

Harness Type: Engine
OEM Connector: 33344977
Service Connector: 19330900
Description: 66-Way F 0.64, 2.8 Series, Sealed (BK with BK Terminal Position Assurance)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13579770 | J-35616-4A (PU) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| II | 19330179 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

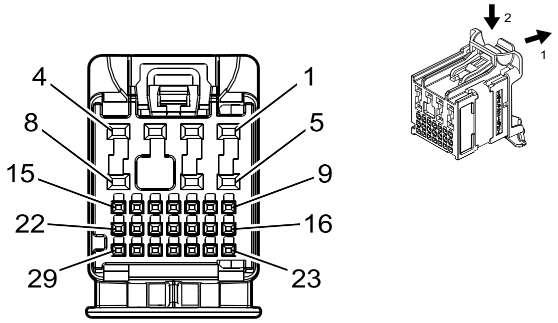
### K71 Transmission Control Module (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/BU | 4507 | Transmission Clutch H Control | II | — |
| 2 | 0.5 | BU | 6401 | Clutch B Control | II | — |
| 3 | 0.5 | GN/WH | 1530 | Transmission Mainline Pressure Solenoid Control | II | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.5 | YE/GN | 4170 | Transmission Position Sensor B 9V Reference | II | — |
| 8 | 0.5 | YE/BU | 4171 | Transmission Position Sensor A 9V Reference | II | — |
| 9 - 12 | — | — | — | Not Occupied | — | — |
| 13 | 0.5 | GN/VT | 4510 | Transmission Intermediate Speed Signal | II | — |
| 14 | 0.5 | GY/BU | 6358 | Output Speed Signal | II | — |
| 15 | 0.5 | GN/YE | 6353 | Input Speed Signal | II | — |
| 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.5 | WH | 4508 | Transmission Clutch G Control | II | — |
| 18 | 0.5 | BN | 6400 | Clutch A Control | II | — |
| 19 | 0.5 | GY | 6402 | Clutch C Control | II | — |
| 20 | 0.5 | VT/WH | 422 | Torque Converter Clutch Solenoid Control | II | — |
| 21 | 0.5 | GN/WH | 6380 | TCC On/Off Solenoid A Control | II | — |
| 22 | 0.5 | YE/BN | 6210 | TCC On/Off Solenoid B Control | II | — |
| 23 | — | — | — | Not Occupied | — | — |

## K71 Transmission Control Module (MQE) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 24 | 0.5 | WH/GY | 4578 | Surge Accumulator Solenoid Low Side Control | II | — |
| 25 | 0.5 | BK/GY | 3927 | IMS Mode Switch Low Reference | II | — |
| 26 - 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.5 | BK/BN | 586 | Transmission Oil Temperature Sensor Low Reference | II | — |
| 29 - 32 | — | — | — | Not Occupied | — | — |
| 33 | 0.5 | GN/GY | 6387 | Transmission High Side Driver 1 Signal Driver | II | — |
| 34 | — | — | — | Not Occupied | — | — |
| 35 | 0.5 | VT/BK | 2139 | Run/Crank Ignition 1 Voltage | II | — |
| 36 | — | — | — | Not Occupied | — | — |
| 37 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | — |
| 38 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | II | — |
| 39 - 46 | — | — | — | Not Occupied | — | — |
| 47 | 0.5 | GY/YE | 4169 | PRNDL S Signal | II | — |
| 48 | — | — | — | Not Occupied | — | — |
| 49 | 0.5 | GY/BN | 6388 | Transmission High Side Driver 2 Signal | II | — |
| 50 | — | — | — | Not Occupied | — | — |
| 51 | 0.5 | VT/YE | 5985 | Accessory Wakeup Serial Data | II | — |
| 52 | — | — | — | Not Occupied | — | — |
| 53 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | — |
| 54 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | II | — |
| 55 - 58 | — | — | — | Not Occupied | — | — |
| 59 | 0.5 | GY/WH | 4168 | PRNDL P Signal | II | — |
| 60 | 0.5 | WH/BK | 5983 | PRNDL C Signal | II | — |
| 61 | 0.5 | GY/BN | 5982 | PRNDL B Signal | II | — |
| 62 | 0.5 | VT/WH | 5981 | PRNDL A Signal | II | — |
| 63 | 0.5 | BN/WH | 585 | Transmission Oil Temperature Sensor Signal | II | — |
| 64 | — | — | — | Not Occupied | — | — |
| 65 | 1.5 | BK/WH | 451 | Signal Ground | I | — |
| 66 | 1.5 | RD/GN | 1840 | Battery Positive Voltage | I | — |

# K73 Telematics Communication Interface Control Module X1 (UE1)



4496253

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33303954
Service Connector: 13506123
Description: 29-Way F 0.5 NANO, 1.2 MCON Series Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300649 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19354361 | EL-35616-58 (BK) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K73 Telematics Communication Interface Control Module X1 (UE1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD/BU | 3240 | Battery Positive Voltage | I | — |
| 2 - 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | BK/WH | 2751 | Signal Ground | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | GN/BK | 2515 | Keypad Control | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | BK/WH | 2751 | Signal Ground | I | — |
| 9 | 0.35 | WH/GN | 1305 | High Speed GMLAN Serial Data (-)9 | II | — |
| 10 | 0.35 | BU/GN | 1304 | High Speed GMLAN Serial Data (+)9 | II | — |
| 11 | 0.35 | GN/WH | 2514 | Keypad Signal | II | — |
| 12 | 0.35 | WH/BU | 5986 | Serial Data Communication Enable | II | — |
| 13 | 0.35 | Bare | 1792 | Low Reference | II | — |
| 14 | 0.35 | BK/GY | 5152 | Voice Recognition Audio Low Reference | II | — |
| 15 | 0.35 | GY/YE | 5149 | Voice Recognition Audio Signal | II | — |
| 16 | 0.35 | WH/GN | 1305 | High Speed GMLAN Serial Data (-)9 | II | — |
| 17 | 0.35 | BU/GN | 1304 | High Speed GMLAN Serial Data (+)9 | II | — |
| 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.35 | YE/VT | 2516 | Keypad Green LED Control | II | — |
| 20 | 0.35 | Bare | 1782 | Low Reference | II | — |

## K73 Telematics Communication Interface Control Module X1 (UE1) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 21 | 0.35 | BK/BN | 654 | Cellular Telephone Microphone Low Reference | II | — |
| 22 | 0.35 | BU | 655 | Cellular Telephone Microphone Signal | II | — |
| 23 | 0.35 | GY/GN | 1102 | Low Speed GMLAN Serial Data #2 | II | — |
| 24 - 25 | — | — | — | Not Occupied | — | — |
| 26 | 0.35 | BN/WH | 2517 | Keypad Red LED Control | II | — |
| 27 | — | — | — | Not Occupied | — | — |
| 28 | 0.35 | GY/WH | 7211 | Ethernet Bus 4 (+) | II | — |
| 29 | 0.35 | GY | 7210 | Ethernet Bus 4 (-) | II | — |

# K73 Telematics Communication Interface Control Module X5 (UE1)

—

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35150100
Service Connector: Not Available
Description: 1-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K73 Telematics Communication Interface Control Module X5 (UE1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| VT | — | — | COAX | Coax Cable | I | — |

# K73 Telematics Communication Interface Control Module X7 (UE1)

—

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35150100
Service Connector: Not Available
Description: 1-Way

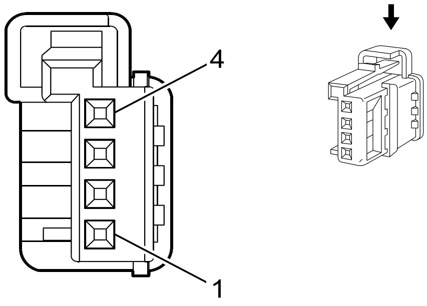
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### K73 Telematics Communication Interface Control Module X7 (UE1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| BN | — | — | COAX | Coax Cable | I | — |

# K77 Remote Control Door Lock Receiver



2179793

## Connector Part Information

Harness Type: Body
OEM Connector: 10768790
Service Connector: 13584096
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

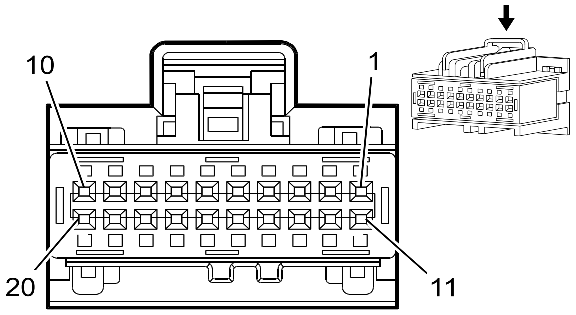
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K77 Remote Control Door Lock Receiver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GY | 3273 | Remote Function Actuator Low Reference | I | — |
| 2 | 0.35 | YE/GN | 3274 | Remote Function Actuator Transmit Signal | I | — |
| 3 | 0.35 | BU/WH | 3275 | Remote Function Actuator Receive Signal | I | — |
| 4 | 0.35 | GY/WH | 3272 | Remote Function Actuator Control | I | — |

# K84 Keyless Entry Control Module X1 (BTM)



1664552

## Connector Part Information

Harness Type: Body
OEM Connector: 13950640
Service Connector: 15126709
Description: 20-Way F USCAR 64 Series (BN)

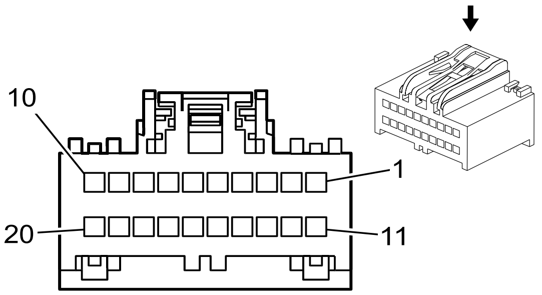
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300631 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K84 Keyless Entry Control Module X1 (BTM)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN/VT | 1601 | Steering Column Lock Signal | I | — |
| 2 | 0.5 | RD/YE | 4340 | Battery Positive Voltage | I | — |
| 3 | 0.5 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.35 | VT/YE | 4 | Accessory Ignition Voltage | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35 | GY/GN | 4083 | RAP Relay 2 Coil Control | I | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.35 | WH/YE | 3574 | Driver Door Open Switch Signal | I | — |
| 10 | 0.35 | YE/BU | 4086 | Pushbutton Start Challenge Active Signal | I | — |
| 11 | 0.35 | GN/BK | 3558 | Passive Start Switch Signal 2 | I | — |
| 12 | 0.35 | BK/GY | 3559 | Passive Start Switch 2 Low Reference | I | — |
| 13 | 0.35 | VT/BK | 3 | Run/Crank Ignition 1 Voltage | I | — |
| 14 | 0.5 | BK/WH | 1151 | Signal Ground | I | — |
| 15 | 0.35 | GY/BK | 3555 | Passive Start Interior Antenna 2 Signal Lo | I | — |
| 16 | 0.35 | BN/BK | 3552 | Passive Start Interior Antenna 1 Signal Hi | I | — |
| 17 | 0.35 | WH | 3553 | Passive Start Interior Antenna 1 Signal Lo | I | — |
| 18 - 19 | — | — | — | Not Occupied | — | — |
| 20 | 0.35 | BU | 3554 | Passive Start Interior Antenna 2 Signal Hi | I | — |

# K84 Keyless Entry Control Module X2 (BTM)



1715228

## Connector Part Information

Harness Type: Body
OEM Connector: 13859758
Service Connector: 15126710
Description: 20-Way F USCAR 64 Series (GY)

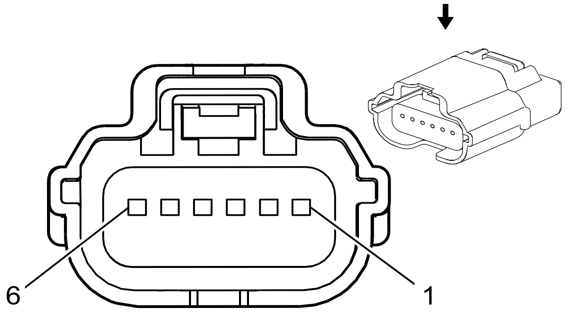
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300631 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K84 Keyless Entry Control Module X2 (BTM)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE/GY | 6158 | Right Rear Door Handle Switch Signal | I | — |
| 2 | 0.35 | BN/YE | 6157 | Left Rear Door Handle Switch Signal | I | — |
| 3 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | VT | 3560 | Passive Entry Driver Door Antenna Signal Hi | I | — |
| 7 | 0.5 | VT/GY | 3561 | Passive Entry Driver Door Antenna Signal Lo | I | — |
| 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.5 | GN/BK | 3563 | Passive Entry Passenger Door Antenna Signal Lo | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | VT/WH | 3571 | Passenger Door Handle Switch Signal | I | — |
| 12 | 0.35 | GN/WH | 3570 | Driver Door Handle Switch Signal | I | — |
| 13 - 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.5 | BN/GN | 3568 | Passive Entry Rear Closure Antenna Signal Hi | I | — |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.5 | GN/GY | 3569 | Passive Entry Rear Closure Antenna Signal Lo | I | — |
| 19 | — | — | — | Not Occupied | — | — |
| 20 | 0.5 | GN/YE | 3562 | Passive Entry Passenger Door Antenna Signal Hi | I | — |

# K85 Passenger Presence Module



1974974

## Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 31404-6132
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Series, Sealed (BK)

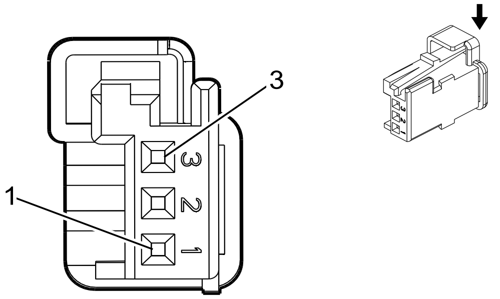
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K85 Passenger Presence Module

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD/GN | 4440 | Battery Positive Voltage | I | — |
| 2 | 0.5 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | BK/WH | 2551 | Signal Ground | I | — |
| 5 | 0.5 | GY/OG | 3946 | Automatic Locking Retractor Switch Low Reference | I | — |
| 6 | 0.5 | OG/BN | 3947 | Automatic Locking Retractor Switch Signal | I | — |

# K89 Immobilizer Control Module (-BTM)



4218883

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10763117
Service Connector: 19333317
Description: 3-Way F 0.64 Micro-Quadlock Series (BK)

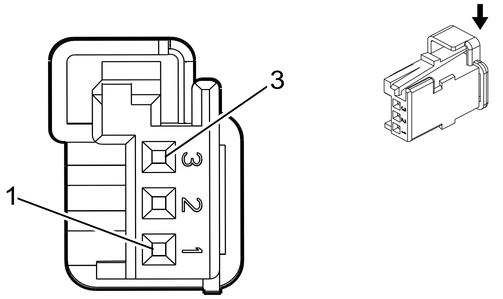
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K89 Immobilizer Control Module (-BTM)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/GY | 3277 | Vehicle Anti-Theft System Immobilizer Low Reference | I | — |
| 2 | 0.5 | GN/VT | 7533 | Local Interconnect Network Serial Data Bus 11 | I | — |
| 3 | 0.5 | GY/BK | 3276 | Vehicle Anti-Theft System Immobilizer Control | I | — |

## K89 Immobilizer Control Module (BTM+D07)



4218883

### Connector Part Information

Harness Type: Floor Console
OEM Connector: 10763117
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Micro-Quadlock Series (BK)

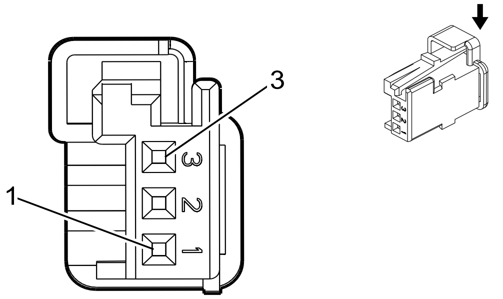
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### K89 Immobilizer Control Module (BTM+D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN/GY | 3277 | Vehicle Anti-Theft System Immobilizer Low Reference | I | — |
| 2 | 0.35 | GN/VT | 7533 | Local Interconnect Network Serial Data Bus 11 | I | — |
| 3 | 0.35 | GY/BK | 3276 | Vehicle Anti-Theft System Immobilizer Control | I | — |

# K89 Immobilizer Control Module (BTM-D07)



4218883

## Connector Part Information

Harness Type: Front Middle Seat
OEM Connector: 953697-1
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 0.64 Micro-Quadlock Series (BK)

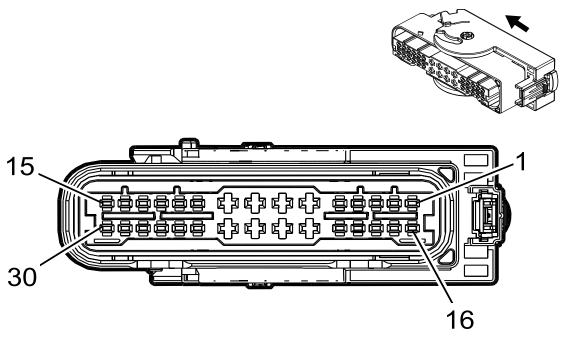
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K89 Immobilizer Control Module (BTM-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN/GY | 3277 | Vehicle Anti-Theft System Immobilizer Low Reference | I | — |
| 2 | 0.35 | GN/VT | 7533 | Local Interconnect Network Serial Data Bus 11 | I | — |
| 3 | 0.35 | GY/BK | 3276 | Vehicle Anti-Theft System Immobilizer Control | I | — |

# K111 Fuel Pump Driver Control Module



3240109

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33386317
Service Connector: 19354086
Description: 30-Way F 1.5, 2.8 Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300440 | J-35616-4A (PU) | J-38125-557 | Not Available | Not Available | Not Available | Not Available |
| II | 19329958 | J-35616-2A (GY) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |

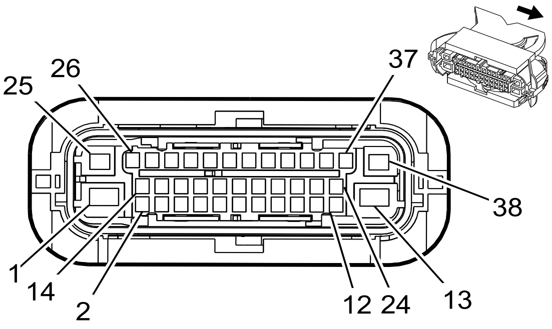
## K111 Fuel Pump Driver Control Module

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/RD | 6862 | Water In Fuel Sensor 5V Reference | II | — |
| 2 | 0.5 | BU/YE | 6861 | Water In Fuel Sensor Signal | II | — |
| 3 | 0.5 | BK/BU | 6863 | Water In Fuel Sensor Low Reference | II | — |
| 4 | 0.5 | BN/VT | 455 | Fuel Filter Temperature Signal | II | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 2.5 | RD/VT | 1940 | Battery Positive Voltage | I | — |
| 8 | 2.5 | GY | 120 | Fuel Pump Control | I | — |
| 9 | 2.5 | YE/GY | 4137 | Fuel Pump Supply Voltage Phase 2 | I | — |
| 10 | 0.5 | YE/RD | 2709 | Fuel Tank Pressure Sensor 5V Reference | II | — |
| 11 | 0.5 | BU/WH | 890 | Fuel Tank Pressure Sensor Signal | II | — |
| 12 | 0.5 | BN/RD | 7445 | Fuel Line Pressure Sensor 5V Reference | II | — |
| 13 | 0.5 | BU/VT | 1589 | Primary Fuel Level Sensor Signal | II | — |
| 14 | — | — | — | Not Occupied | — | — |
| 15 | 0.5 | WH | 4499 | High Speed GMLAN Serial Data (-) 7 | II | — |
| 16 | 0.5 | VT/GN | 4320 | Selective Catalytic Reduction Power Module Wake-Up Signal | II | — |
| 17 | 0.5 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | II | — |
| 18 | 0.5 | GN/GY | 465 | Fuel Pump Primary Relay Control | II | — |
| 19 | 0.5 | BK/VT | 412 | Fuel Filter Temperature Sensor Low Reference | II | — |

## K111 Fuel Pump Driver Control Module (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | WH | 1310 | EVAP Canister Vent Solenoid Control | I | — |
| 22 | 2.5 | BK | 1750 | Ground | I | — |
| 23 | 0.35<br>0.5 | BN<br>BN | 7444<br>7444 | Fuel System Control Module Shield Ground<br>Fuel System Control Module Shield Ground | I<br>I | LM2<br>-LM2 |
| 24 | 2.5 | WH/BN | 4138 | Fuel Pump Supply Voltage Phase 3 | I | — |
| 25 | 0.5 | BK/BN | 6284 | Fuel Tank Vapor Pressure Sensor Low Reference | II | — |
| 26 | 0.5 | BU/WH | 7446 | Fuel Line Pressure Sensor Signal | II | — |
| 27 | 0.5 | BK/YE | 7447 | Fuel Line Pressure Sensor Low Reference | II | — |
| 28 | 0.5 | BK/GN | 6281 | Fuel Level Sensor Low Reference | II | — |
| 29 | — | — | — | Not Occupied | — | — |
| 30 | 0.5 | BU/BN | 4498 | High Speed GMLAN Serial Data (+) 7 | II | — |

# K115 Reductant Control Module (LM2)



3240110

## Connector Part Information

Harness Type: DEF Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 38-Way F 1.5 CTS, 2.8 MCP, 4.8 MCP Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

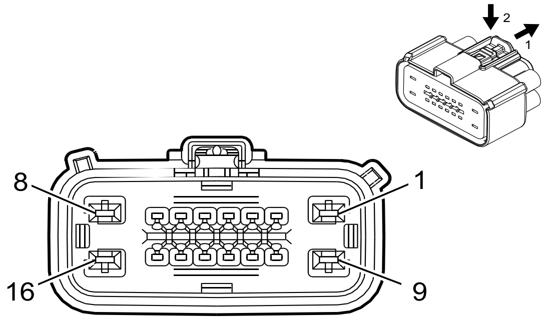
## K115 Reductant Control Module (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 3.0 | BK | 3921 | DEF Heater Supply 1 | I | — |
| 2 | 1.0 | BN | — | — | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 1.0 | YE | — | — | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | BK | — | — | I | — |
| 7 | 0.5 | BK | — | — | I | — |
| 8 | 0.5 | BN | — | — | I | — |
| 9 | 0.5 | BK | — | — | I | — |
| 10 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | I | — |
| 11 | 1.0 | YE | — | — | I | — |
| 12 | — | — | — | Not Occupied | — | — |
| 13 | 3.0 | WH | 1651 | Signal Ground | I | — |
| 14 | 1.0 | BN | — | — | I | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 1.0 | BU | — | — | I | — |
| 17 | 0.5 | BK | 5985 | Accessory Wakeup Serial Data | I | — |
| 18 | 0.5 | BN | — | — | I | — |
| 19 | 0.5 | BN | — | — | I | — |
| 20 | 0.5 | BU | — | — | I | — |
| 21 | 0.5 | BU | — | — | I | — |

## K115 Reductant Control Module (LM2) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 22 | 0.5 | BN | 2500 | High Speed GMLAN Serial Data (+) 1 | I | — |
| 23 | 0.5 | BK | 2501 | High Speed GMLAN Serial Data (-) 1 | I | — |
| 24 | 0.5 | BN | — | — | I | — |
| 25 | 2.0 | BK | 1651 | Signal Ground | I | — |
| 26 | 1.0 | WH | — | — | I | — |
| 27 | — | — | — | Not Occupied | — | — |
| 28 | 1.0 | BN | — | — | I | — |
| 29 | 0.5 | BK | 4320 | Selective Catalytic Reduction Power Module Wake-Up Signal | I | — |
| 30 | 0.5 | BN | 439 | Run/Crank Ignition 1 Voltage | I | — |
| 31 | 0.5 | BU | 4498 | High Speed GMLAN Serial Data (+) 7 | I | — |
| 32 | 0.5 | BU | 4498 | High Speed GMLAN Serial Data (+) 7 | I | — |
| 33 | 0.5 | BN | 4499 | High Speed GMLAN Serial Data (-) 7 | I | — |
| 34 | 0.5 | BN | 4499 | High Speed GMLAN Serial Data (-) 7 | I | — |
| 35 | 0.5 | BN | 2501 | High Speed GMLAN Serial Data (-) 1 | I | — |
| 36 | 1.0 | BU | — | — | I | — |
| 37 | 1.0 | WH | — | — | I | — |
| 38 | 2.0 | RD | 3440 | Battery Positive Voltage | I | — |

# K133 Trailer Brake Power Control Module (JL1)



4624589

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33297568
Service Connector: 13599889
Description: 16-Way F 1.5, 2.8 Series, Sealed (GY)

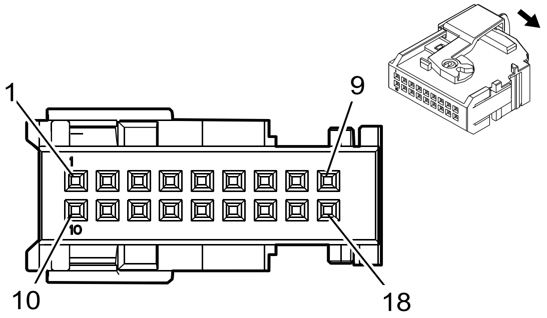
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576377 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | 4 | D |
| II | 19300432 | J-35616-2A (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |

### K133 Trailer Brake Power Control Module (JL1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | RD/VT | 1242 | Battery Positive Voltage | I | — |
| 2 | 1 | WH/BK | 2223 | Trailer Brake Control Signal | II | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | YE/BK | 2224 | Trailer Brake Enable Signal | II | — |
| 6 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 2.5 | BU | 47 | Trailer Auxiliary Control | I | — |
| 9 | 2.5 | BK | 1450 | Ground | I | — |
| 10 - 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | GN/BU | 2733 | Local Interconnect Network Bus 33 | II | — |
| 13 - 16 | — | — | — | Not Occupied | — | — |

# K157 Video Processing Control Module X1 (UVI/UV2)



4329088

## Connector Part Information

Harness Type: Body
OEM Connector: 33168840
Service Connector: 19369840
Description: 18-Way F Micro-Quadlock Series (BK)

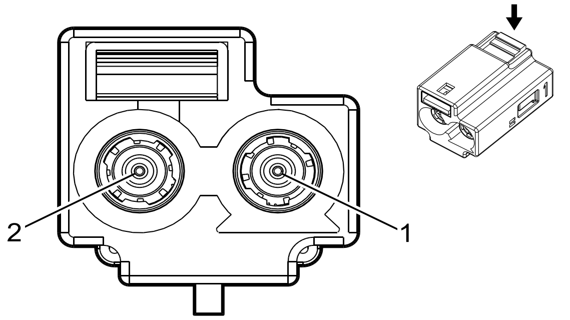
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575587 | J-35616-64B (LT BU) | J-38125-12A | Not Available | Not Available | Not Available | Not Available |
| II | 13575859 | J-35616-64B (LT BU) | J-38125-12A | Not Available | Not Available | Not Available | Not Available |

## K157 Video Processing Control Module X1 (UVI/UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD/VT | 1640 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | BK/WH | 2751 | Signal Ground | II | — |
| 4 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.75 | GY/GN | 1102 | Low Speed GMLAN Serial Data #2 | II | — |
| 10 | 0.35 | RD/VT | 1640 | Battery Positive Voltage | I | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.75 | BK/WH | 2751 | Signal Ground | II | — |
| 13 - 18 | — | — | — | Not Occupied | — | — |

# K157 Video Processing Control Module X3 (UVI/UV2)



4877749

## Connector Part Information

Harness Type: Body
OEM Connector: 13509682
Service Connector: Not Available
Description: 2-Way F Coax Type (RD)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K157 Video Processing Control Module X3 (UVI/UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | COAX | — | Combined Camera Video Signal #2 | I | — |
| 2 | — | COAX | — | Camera Signal 2 | I | — |

# K157 Video Processing Control Module X4 (UVI/UV2)

—

## Connector Part Information

Harness Type: Body
OEM Connector: 13509683
Service Connector: Service by Harness - See Part Catalog
Description: F Coax Type

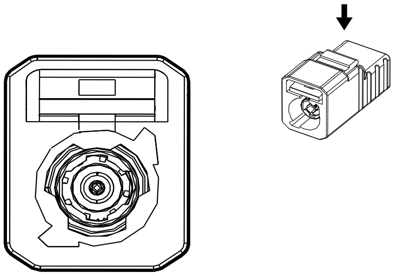
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### K157 Video Processing Control Module X4 (UVI/UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | COAX | — | Left Side Vision Camera Video Signal | I | — |
| 2 | — | COAX | — | Right Side Vision Camera Video Signal | I | — |

# K157 Video Processing Control Module X5 (UVI/UV2)



## Connector Part Information

Harness Type: Body COAX
OEM Connector: 13598487
Service Connector: Service by Cable Assembly — See Part Catalog
Description: F Coax Type

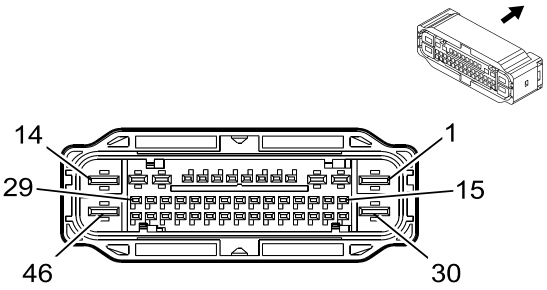
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K157 Video Processing Control Module X5 (UVI/UV2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | Front Vision Camera #1 Signal | I | — |

## K160 Brake System Control Module



4162046

### Connector Part Information

Harness Type: Body
OEM Connector: 33222138
Service Connector: 19333026
Description: 46-Way F 1.2 OCS, 2.8, 4.8 CTS Series, Sealed (GY)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300649 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| I | 19300649 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19332900 | J-35616-42 (RD) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19332900 | J-35616-42 (RD) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19333088 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19333088 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | 19370818 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | 19370818 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

### K160 Brake System Control Module

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 6 | BK | 150 | Ground | II | — |
| 2 | 2.5 | WH | 2001 | Park Brake Motor Apply Left Rear Control | III | — |
| 3 | 2.5 | GY/BK | 4369 | Park Brake Motor Low Reference Left Rear | III | — |
| 4 | 0.5 | GY/WH | 7064 | Wheel Speed Sensor Control Left Front | I | — |
| 5 | 0.5 | GY | 830 | Wheel Speed Sensor Signal Left Front | I | — |
| 6 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.5 | VT/GN | 439 | Run/Crank Ignition 1 Voltage | I | — |
| 10 | 0.5 | GY/BN | 7065 | Wheel Speed Sensor Control Right Front | I | — |
| 11 | 0.5 | YE | 872 | Wheel Speed Sensor Signal Right Front | I | — |

## K160 Brake System Control Module (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 12 | 2.5 | GN/VT | 1988 | Park Brake Motor Apply Right Rear Control | III | — |
| 13 | 2.5 | GY | 4368 | Park Brake Motor Low Reference Right Rear | III | — |
| 14 | 6 | RD/YE | 442 | Battery Positive Voltage | II | — |
| 15 | 0.5 | GY/BK | 7127 | Wheel Speed Sensor Control Left Rear | I | — |
| 16 | 0.5 | BU | 884 | Wheel Speed Sensor Signal Left Rear | I | — |
| 17 | 0.5 | BU/YE | 6105 | High Speed GMLAN Serial Data (+) 2 | I | — |
| 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.35 | GN/GY | 817 | Vehicle Speed Signal | I | — |
| 20 - 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.35 | GN/YE | 2731 | Local Interconnect Network Bus 31 | I | — |
| 24 | — | — | — | Not Occupied | — | — |
| 25 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | I | — |
| 26 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | I | — |
| 27 | 0.35 | VT/YE | 5985 | Accessory Wakeup Serial Data | I | — |
| 28 | 0.5 | GY/YE | 7128 | Wheel Speed Sensor Control Right Rear | I | — |
| 29 | 0.5 | VT | 882 | Wheel Speed Sensor Signal Right Rear | I | — |
| 30 | 6 | BK | 2250 | Ground | II | — |
| 31 - 32 | — | — | — | Not Occupied | — | — |
| 33 | 0.5 | WH | 6106 | High Speed GMLAN Serial Data (-) 2 | I | — |
| 34 | — | — | — | Not Occupied | — | — |
| 35 | 0.35 | GN/BU | 2733 | Local Interconnect Network Bus 33 | I | — |
| 36 | 1 | WH/BK | 2223 | Trailer Brake Control Signal | IV | — |
| 37 | 0.5 | YE/BK | 2224 | Trailer Brake Enable Signal | I | — |
| 38 | 0.5 | GN/GY | 333 | Brake Fluid Level Sensor Signal | I | — |
| 39 | 0.5 | WH | 1612 | Brake Lining Wear Sensor Signal Left Front | I | — |
| 40 | — | — | — | Not Occupied | — | — |
| 41 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | I | — |
| 42 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | I | — |
| 43 | — | — | — | Not Occupied | — | — |
| 44 | 0.5 | GN/YE | 1616 | Brake Lining Wear Sensor Signal Rear | I | — |
| 45 | — | — | — | Not Occupied | — | — |
| 46 | 6 | RD/VT | 1640 | Battery Positive Voltage | II | — |

# K166L Multifunction LED Control Module - Left Headlamp (GFD)

—

## Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K166L Multifunction LED Control Module - Left Headlamp (GFD)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 7538 | Left Front DRL Control | I | — |
| 2 | — | BK | 1314 | Left Front Turn Signal Lamp Control | I | — |
| 3 | — | BK | — | — | I | — |
| 4 | — | BK | — | — | I | — |
| 5 | — | BK | — | — | I | — |
| 6 | — | BK | — | — | I | — |
| 7 | — | BK | — | — | I | — |
| 8 | — | BK | — | — | I | — |
| 9 | — | BK | — | — | I | — |
| 10 | — | BK | 150 | Ground | I | — |
| 11 | — | BK | 2227 | Left Headlamp Control | I | — |
| 12 | — | BK | 711 | Left Headlamp High Beam Control | I | — |
| 13 | — | BK | — | — | I | — |
| 14 | — | BK | — | — | I | — |
| 15 | — | BK | — | — | I | — |
| 16 | — | BK | — | — | I | — |
| 17 | — | BK | 3204 | Left Headlamp Bulb Outage Signal | I | — |
| 18 | — | BK | 712 | Left Headlamp Low Beam Control | I | — |
| 19 | — | BK | — | — | I | — |
| 20 | — | BK | — | — | I | — |

# K166L Multifunction LED Control Module - Left Headlamp (GFG/GFU/GFW)

—

## Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 32-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K166L Multifunction LED Control Module - Left Headlamp (GFG/GFU/GFW)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 7538 | Left Front DRL Control | I | — |
| 2 | — | BK | 1314 | Left Front Turn Signal Lamp Control | I | — |
| 3 | — | BK | — | — | I | — |
| 4 | — | BK | — | — | I | — |
| 5 | — | BK | — | — | I | — |
| 6 | — | BK | — | — | I | — |
| 7 | — | BU | — | — | I | — |
| 8 | — | GY | — | — | I | — |
| 9 | — | BK | — | — | I | — |
| 11 | — | BK | 2227 | Left Headlamp Control | I | — |
| 12 | — | BK | 711 | Left Headlamp High Beam Control | I | — |
| 13 | — | BK | — | — | I | — |
| 14 | — | BK | — | — | I | — |
| 15 | — | BK | — | — | I | — |
| 16 | — | BK | — | — | I | — |
| 17 | — | BK | 709 | Left Park Lamp Control | I | — |
| 18 | — | BK | 712 | Left Headlamp Low Beam Control | I | — |
| 19 | — | BK | — | — | I | — |
| 20 | — | BK | — | — | I | — |
| 21 | — | BK | — | — | I | — |
| 22 | — | BK | — | — | I | — |
| 23 | — | BK | — | — | I | — |
| 24 | — | BK | 150 | Ground | I | — |
| 25 | — | BK | — | — | I | — |
| 26 | — | BK | — | — | I | — |
| 27 | — | BK | — | — | I | — |
| 29 | — | BK | — | — | I | — |
| 31 | — | BK | — | — | I | — |

# K166R Multifunction LED Control Module - Right Headlamp (GFD)

—

## Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### K166R Multifunction LED Control Module - Right Headlamp (GFD)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 7539 | Right Front DRL Control | I | — |
| 2 | — | BK | 1315 | Right Front Turn Signal Lamp Control | I | — |
| 3 | — | BK | — | — | I | — |
| 4 | — | BK | — | — | I | — |
| 5 | — | BK | — | — | I | — |
| 6 | — | BK | — | — | I | — |
| 7 | — | BK | — | — | I | — |
| 8 | — | BK | — | — | I | — |
| 9 | — | BK | — | — | I | — |
| 10 | — | BK | 250 | Ground | I | — |
| 11 | — | BK | 2226 | Right Headlamp Control | I | — |
| 12 | — | BK | 311 | Right Headlamp High Beam Control | I | — |
| 13 | — | BK | — | — | I | — |
| 14 | — | BK | — | — | I | — |
| 15 | — | BK | — | — | I | — |
| 16 | — | BK | — | — | I | — |
| 17 | — | BK | 3203 | Right Headlamp Bulb Outage Signal | I | — |
| 18 | — | BK | 312 | Right Headlamp Low Beam Control | I | — |
| 19 | — | BK | — | — | I | — |
| 20 | — | BK | — | — | I | — |

# K166R Multifunction LED Control Module - Right Headlamp (GFG/GFU/GFW)

—

## Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 32-Way

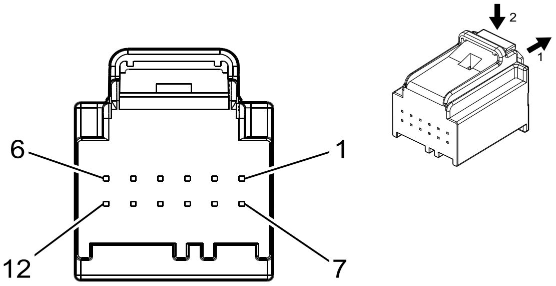
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### K166R Multifunction LED Control Module - Right Headlamp (GFG/GFU/GFW)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 7539 | Right Front DRL Control | I | — |
| 2 | — | BK | 1315 | Right Front Turn Signal Lamp Control | I | — |
| 3 | — | BK | — | — | I | — |
| 4 | — | BK | — | — | I | — |
| 5 | — | BK | — | — | I | — |
| 6 | — | BK | — | — | I | — |
| 7 | — | BK | — | — | I | — |
| 8 | — | BK | — | — | I | — |
| 9 | — | BK | — | — | I | — |
| 11 | — | BK | 2226 | Right Headlamp Control | I | — |
| 12 | — | BK | 311 | Right Headlamp High Beam Control | I | — |
| 13 | — | BK | — | — | I | — |
| 14 | — | BK | — | — | I | — |
| 15 | — | BK | — | — | I | — |
| 16 | — | BK | 3201 | Throttle Inlet Absolute Pressure Sensor 5V Reference | I | — |
| 17 | — | BK | 309 | Right Park Lamp Control | I | — |
| 18 | — | BK | 312 | Right Headlamp Low Beam Control | I | — |
| 19 | — | BK | — | — | I | — |
| 20 | — | BK | — | — | I | — |
| 21 | — | BK | — | — | I | — |
| 22 | — | BK | — | — | I | — |
| 23 | — | BK | — | — | I | — |
| 24 | — | BK | 250 | Ground | I | — |
| 25 | — | BK | — | — | I | — |
| 26 | — | BK | — | — | I | — |
| 27 | — | BK | — | — | I | — |
| 29 | — | BK | — | — | I | — |
| 31 | — | BK | — | — | I | — |

# K182 Parking Assist Control Module X1 ((UD5/UD7)+(Crew Cab/Extended Cab))



5095565

## Connector Part Information

Harness Type: Body
OEM Connector: 35130710
Service Connector: 13525987
Description: 12-Way F 0.64 Series, Sealed (BK)

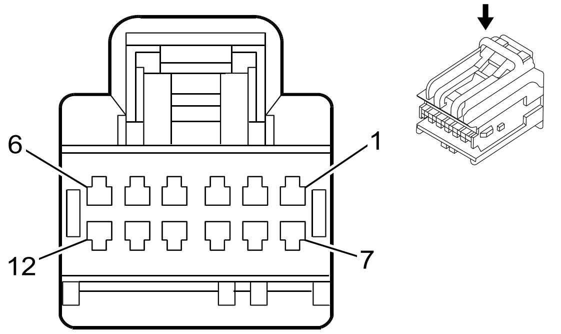
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300631 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K182 Parking Assist Control Module X1 ((UD5/UD7)+(Crew Cab/Extended Cab))

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD/GN | 3140 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | GN/BN | 5852 | Rear Park Assist LED Disable Signal | I | — |
| 4 | 0.35 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 5 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | GY/GN | 2555 | Rear Park Assist Disable Signal | I | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.35<br>0.5 | BK/WH<br>BK/WH | 1151<br>1151 | Signal Ground<br>Signal Ground | I<br>I | (UD5/UD7)+BTM<br>(UD5/UD7)-BTM |
| 11 - 12 | — | — | — | Not Occupied | — | — |

# K182 Parking Assist Control Module X1 ((UD5/UD7)+Regular Cab)



1664569

## Connector Part Information

Harness Type: Body
OEM Connector: 13950639
Service Connector: 19354838
Description: 12-Way F 0.64 Series, Sealed (BK)

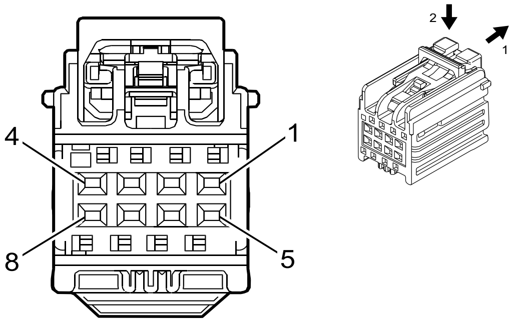
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300631 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## K182 Parking Assist Control Module X1 ((UD5/UD7)+Regular Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD/GN | 3140 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | GN/BN | 5852 | Rear Park Assist LED Disable Signal | I | — |
| 4 | 0.35 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 5 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | GY/GN | 2555 | Rear Park Assist Disable Signal | I | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.35<br>0.5 | BK/WH<br>BK/WH | 1151<br>1151 | Signal Ground<br>Signal Ground | I<br>I | (UD5/UD7)+BTM<br>(UD5/UD7)-BTM |
| 11 - 12 | — | — | — | Not Occupied | — | — |

# K182 Parking Assist Control Module X2 (UD5/UD7)



4280711

## Connector Part Information

Harness Type: Body
OEM Connector: 33183559
Service Connector: 19355209
Description: 8-Way F YESC Kaizen Series (GY)

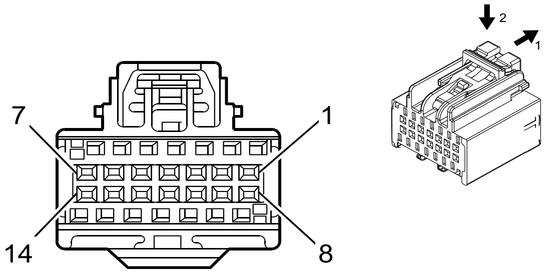
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## K182 Parking Assist Control Module X2 (UD5/UD7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.5 | YE/WH | 2377 | Right Rear Middle Object Sensor Signal | I | — |
| 3 | 0.5 | YE | 2375 | Left Rear Corner Object Sensor Signal | I | — |
| 4 | 0.5 | BN/WH | 2374 | Object Sensor Control | I | — |
| 5 | 0.5 | YE/VT | 2378 | Right Rear Corner Object Sensor Signal | I | — |
| 6 | 0.5 | YE/BU | 2376 | Left Rear Middle Object Sensor Signal | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | BK/GY | 2379 | Object Sensor Low Reference | I | — |

# K182 Parking Assist Control Module X3 (UD5/UD7)



4547098

## Connector Part Information

Harness Type: Body
OEM Connector: 35014564
Service Connector: 19354933
Description: 14-Way F 0.64 Kaizen Series (BU)

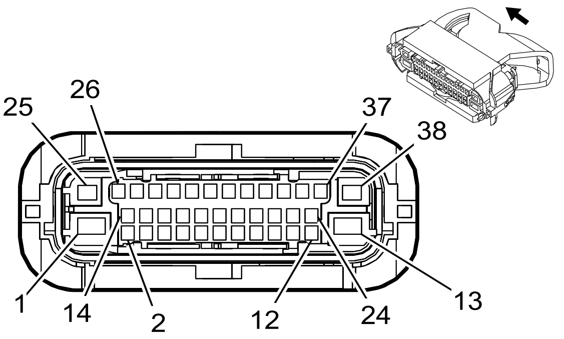
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575742 | J-35616-64B (LT BU) | J-38125-215A | SAIT-A03T-M064 | Yazaki 14 | P | P |

## K182 Parking Assist Control Module X3 (UD5/UD7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/VT | 5213 | Front Parking Left/Right/Mid Sensor | I | — |
| 2 - 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | YE/GY | 5216 | Front Parking Left Mid Sensor | I | — |
| 5 | 0.5 | WH/GY | 5217 | Front Parking Right Corner Sensor | I | — |
| 6 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | BK/BU | 5214 | Front Parking Sensor Low Reference | I | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.5 | VT/WH | 5215 | Front Parking Left Corner Sensor | I | — |
| 11 | 0.5 | VT/GY | 5218 | Front Parking Right Mid Sensor | I | — |
| 12 - 14 | — | — | — | Not Occupied | — | — |

## K194 Pickup Box Endgate Control Module



3240111

### Connector Part Information

Harness Type: Endgate

OEM Connector: 13924619

Service Connector: Service by Harness - See Part Catalog

Description: 38-Way F 1.5 CTS, 2.8 MCP, 4.8 MCP Series, Sealed (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-40 (BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

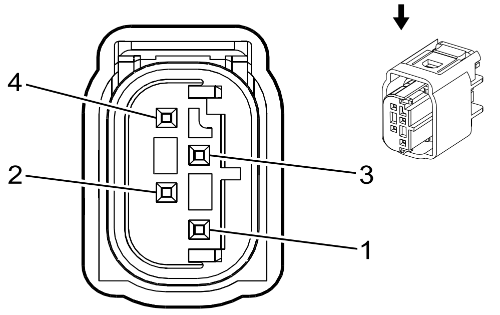
### K194 Pickup Box Endgate Control Module

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1450 | Ground | II | — |
| 2 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | PK/BK | 4668 | Rear Closure Ajar Switch Signal 3 | I | — |
| 6 | 0.5 | GY/VT | 4678 | Rear Closure Ajar Switch Signal 1 | I | — |
| 7 | 0.35 | GN/BK | 4659 | Rear Closure Open | I | — |
| 8 | 0.35 | BU/BK | 4665 | Rear Closure Ajar Switch Signal 2 | I | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.35 | YE | 1144 | Endgate Release Switch Discrete Signal Exterior | I | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.5 | GY | 1198 | Endgate Release Switch Analog Signal Interior | I | — |
| 13 | 2.5 | RD/GY | 7040 | Battery Positive Voltage | II | — |
| 14 | 0.5 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.35 | YE/RD | 7734 | Rear Closure Latch 2 Rachet Status | I | — |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | 0.5 | BN/RD | 4683 | Rear Closure Position Sensor Voltage Reference | I | — |

## K194 Pickup Box Endgate Control Module (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 19 | 0.35 | BK/GN | 4687 | Rear Closure Position Sensor Low Reference | I | — |
| 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.35 | BN/YE | 4686 | Rear Closure Position Sensor Signal 2 | I | — |
| 22 | 0.5 | BU/WH | 4685 | Rear Closure Position Sensor Signal 1 | I | — |
| 23 | 0.5 | WH | 7735 | Rear Closure Latch 2 Pawl Status | I | — |
| 24 | 0.5 | VT | 7736 | Rear Closure Latch 2 Unlatch Status | I | — |
| 25 | 1 | BN/WH | 4690 | Rear Closure Open/Close Motor Close Control | III | — |
| 26 | 0.35 | OG | 7733 | Rear Closure Latch 2 Sector Status | I | — |
| 27 | 0.5 | GY/BK | 1575 | Rear Closure Sensor Low Reference 2 | I | — |
| 28 | 0.5 | BK/VT | 4656 | Rear Closure Object Sensor Low Reference | I | — |
| 29 | — | — | — | Not Occupied | — | — |
| 30 | 1 | BU | 1509 | Rear Closure Cinch Latch Motor 2 Release Control | I | — |
| 31 | 1 | PK | 1499 | Rear Closure Cinch Latch Motor 2 Cinch Control | I | — |
| 32 | — | — | — | Not Occupied | — | — |
| 33 | 1 | BU/GY | 4682 | Rear Closure Cinch Latch Motor Close Control | I | — |
| 34 | 1 | BN | 4681 | Rear Closure Cinch Latch Motor Open Control | I | — |
| 35 | 0.5 | GN | 1577 | Rear Closure Clutch Control | I | — |
| 36 | 0.5 | OG/WH | 1590 | Rear Closure Clutch Return | I | — |
| 37 | — | — | — | Not Occupied | — | — |
| 38 | 1 | WH | 4689 | Rear Closure Open/Close Motor Open Control | III | — |

## K214 Trailer Tire Pressure Indicator Module



2173574

### Connector Part Information

Harness Type: Chassis
OEM Connector: 13679454
Service Connector: 13314098
Description: 4-Way F 0.64 Micro-Quadlock Series, Sealed (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### K214 Trailer Tire Pressure Indicator Module

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD/GN | 1840 | Battery Positive Voltage | I | — |
| 2 | 0.75 | BK | 1750 | Ground | I | — |
| 3 | 0.5 | BU/GN | 1304 | High Speed GMLAN Serial Data (+)9 | I | — |
| 4 | 0.5 | WH/GN | 1305 | High Speed GMLAN Serial Data (-)9 | I | — |

# M4 Air Inlet Door Actuator

—

## Connector Part Information

Harness Type: HVAC
OEM Connector: 13591510
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### M4 Air Inlet Door Actuator

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | WH/BK | 3173 | Air Inlet Door Stepper Motor Control 1 | I | — |
| 2 | — | GY/BU | 7572 | HVAC Motor Control | I | — |
| 3 | — | VT/GN | 3174 | Air Inlet Door Stepper Motor Control 2 | I | — |
| 4 | — | YE/GN | 3175 | Air Inlet Door Stepper Motor Control 3 | I | — |
| 6 | — | YE | 3176 | Air Inlet Door Stepper Motor Control 4 | I | — |

# M6L Air Temperature Door Actuator - Left

—

## Connector Part Information

Harness Type: HVAC
OEM Connector: 13591510
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M6L Air Temperature Door Actuator - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BN/VT | 3169 | Temp Door Stepper Motor Control 1 | I | — |
| 2 | — | YE/ | 7572 | HVAC Motor Control | I | — |
| 3 | — | BN/WH | 3170 | Temp Door Stepper Motor Control 2 | I | — |
| 4 | — | BN/WH | 3171 | Temp Door Stepper Motor Control 3 | I | — |
| 6 | — | WH | 3172 | Temp Door Stepper Motor Control 4 | I | — |

# M6R Air Temperature Door Actuator - Right (CJ2)

—

## Connector Part Information

Harness Type: HVAC
OEM Connector: 13591510
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way

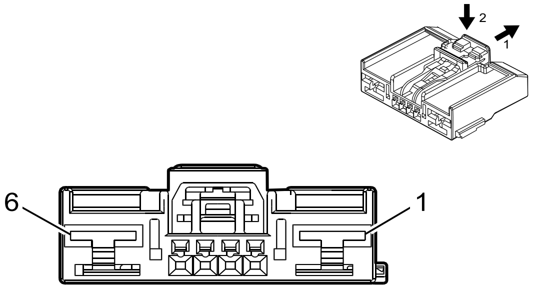
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M6R Air Temperature Door Actuator - Right (CJ2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GY | 3181 | Temp Door Stepper Motor Passenger Control 1 | I | — |
| 2 | — | BK/YE | 7572 | HVAC Motor Control | I | — |
| 3 | — | BN/GN | 3182 | Temp Door Stepper Motor Passenger Control 2 | I | — |
| 4 | — | BN | 3183 | Temp Door Stepper Motor Passenger Control 3 | I | — |
| 6 | — | VT/GN | 3184 | Temp Door Stepper Motor Passenger Control 4 | I | — |

# M8 Blower Motor



4650258

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33395154
Service Connector: 19356432
Description: 6-Way F 0.64, 6.3 Series (BK)

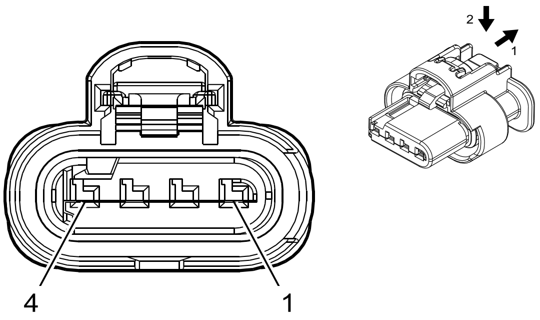
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-42 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M8 Blower Motor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 4 | RD/VT | 542 | Battery Positive Voltage | I | — |
| 2 | 0.35 | BU/GY | 754 | Blower Motor Speed Control | II | — |
| 3 | 0.35 | GN/BU | 761 | Blower Speed Feedback Signal | II | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 4 | BK | 1050 | Ground | I | — |

# M26 Front Axle Engagement Actuator (NP0/NQH)



4210809

## Connector Part Information

Harness Type: Transfer Case
OEM Connector: 33390897
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON-CB Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M26 Front Axle Engagement Actuator (NP0/NQH)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BK | 2139 | Run/Crank Ignition 1 Voltage | I | — |
| 2 | 0.5 | GY/BK | 1570 | Front Axle Actuator Control | I | — |
| 3 | 0.5 | YE/WH | 1695 | Four Wheel Drive Wheel Lock Indicator Control | I | — |
| 4 | 0.5 | BK | 4450 | Ground | I | — |

# M37 Mode Door Actuator

—

## Connector Part Information

Harness Type: HVAC
OEM Connector: 13591510
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way

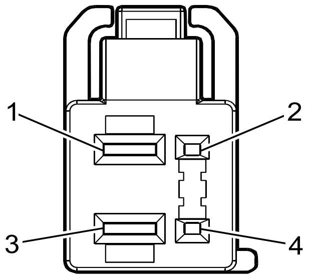
## Terminal Part Information

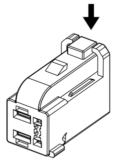
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M37 Mode Door Actuator

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GY | 3165 | Mode Door Stepper Motor Control 1 | I | — |
| 2 | — | BN/ | 7572 | HVAC Motor Control | I | — |
| 3 | — | BN/GN | 3166 | Mode Door Stepper Motor Control 2 | I | — |
| 4 | — | BU/BN | 3167 | Mode Door Stepper Motor Control 3 | I | — |
| 6 | — | GY | 3168 | Mode Door Stepper Motor Control 4 | I | — |

## M50D Seat Front Vertical Motor - Driver





3683652

### Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

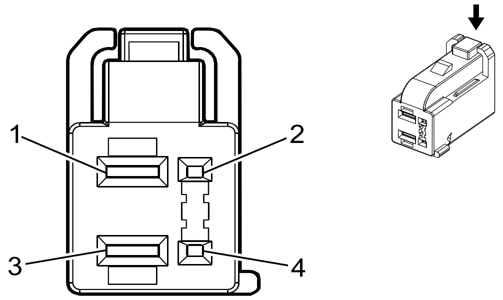
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### M50D Seat Front Vertical Motor - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | BU/VT | 287 | Driver Power Seat Front Vertical Motor Down Control | I | — |
| 2 | 0.5 | WH/RD | 3298 | Memory Sensor High Reference 2 | II | — |
| 3 | 1.5 | GN/BN | 286 | Driver Power Seat Front Vertical Motor Up Control | I | — |
| 4 | 0.5 | BN/WH | 557 | Memory Seat Front Vertical Motor Position Sensor Signal | II | — |

# M50P Seat Front Vertical Motor - Passenger (A7K)



3683652

### Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

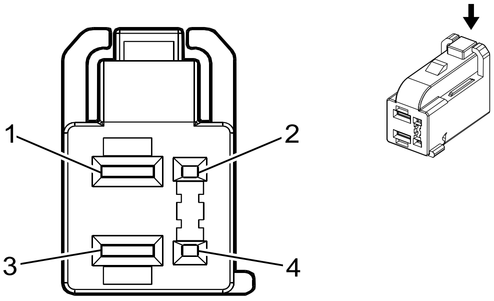
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M50P Seat Front Vertical Motor - Passenger (A7K)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN/VT | 297 | Passenger Power Seat Front Vertical Motor Up Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | GN/BU | 298 | Passenger Power Seat Front Vertical Motor Down Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M51D Seat Horizontal Motor - Driver



3683652

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

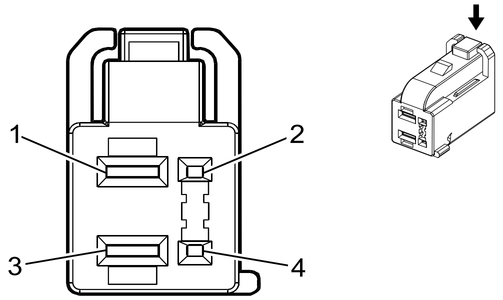
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M51D Seat Horizontal Motor - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GY/GN | 284 | Driver Power Seat Horizontal Motor Rearward Control | I | — |
| 2 | 0.5 | GN | 569 | Memory Seat Horizontal Motor Position Sensor Signal | II | — |
| 3 | 1.5 | YE/BU | 285 | Driver Power Seat Horizontal Motor Forward Control | I | — |
| 4 | 0.5 | WH/RD | 3298 | Memory Sensor High Reference 2 | II | — |

# M51P Seat Horizontal Motor - Passenger (A7K)



3683652

## Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

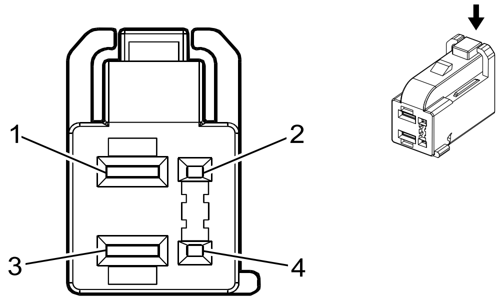
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M51P Seat Horizontal Motor - Passenger (A7K)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | YE/BU | 290 | Passenger Power Seat Horizontal Motor Rearward Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | YE/WH | 296 | Passenger Power Seat Horizontal Motor Forward Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M55D Seat Rear Vertical Motor - Driver



## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

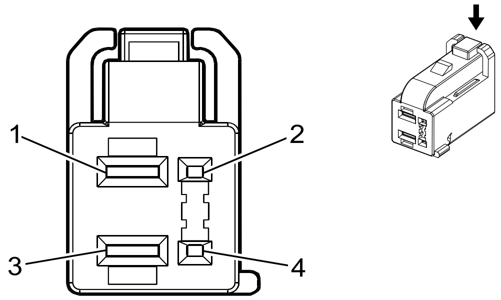
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M55D Seat Rear Vertical Motor - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GY/BU | 283 | Driver Power Seat Rear Vertical Motor Down Control | I | — |
| 2 | 0.5 | YE/BU | 568 | Memory Seat Rear Vertical Motor Position Sensor Signal | II | — |
| 3 | 1.5 | YE | 282 | Driver Power Seat Rear Vertical Motor Up Control | I | — |
| 4 | 0.5 | WH/RD | 3298 | Memory Sensor High Reference 2 | II | — |

## M55P Seat Rear Vertical Motor - Passenger (A7K)



3683652

### Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

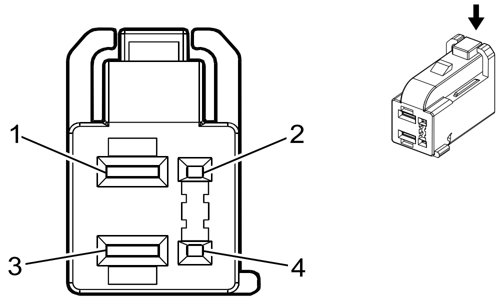
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### M55P Seat Rear Vertical Motor - Passenger (A7K)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | BU/WH | 289 | Passenger Power Seat Rear Vertical Motor Down Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | GN/WH | 288 | Passenger Power Seat Rear Vertical Motor Up Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M56D Seat Recline Motor - Driver



3683652

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2272784-1
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64, 2.8 Series (BK)

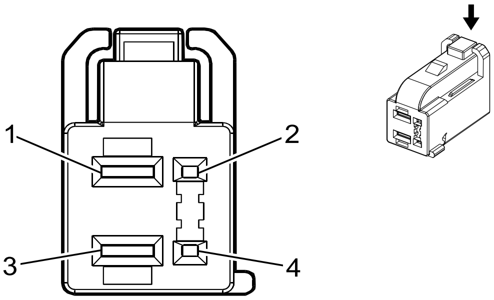
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M56D Seat Recline Motor - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN/YE | 276 | Driver Power Seat Recline Motor Forward Control | I | — |
| 2 | 0.5 | WH/RD | 3298 | Memory Sensor High Reference 2 | II | — |
| 3 | 1.5 | BU/YE | 277 | Driver Power Seat Recline Motor Rearward Control | I | — |
| 4 | 0.5 | WH/BK | 570 | Driver Memory Seat Recline Motor Position Sensor Signal | II | — |

# M56P Seat Recline Motor - Passenger (A7K)



3683652

## Connector Part Information

Harness Type: Passenger Seat

OEM Connector: 2272784-1

Service Connector: Service by Harness - See Part Catalog

Description: 4-Way F 0.64, 2.8 Series (BK)

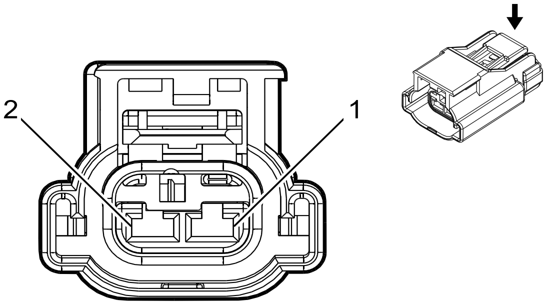
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M56P Seat Recline Motor - Passenger (A7K)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN | 76 | Passenger Power Seat Recline Motor Forward Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 1.5 | BU/BN | 77 | Passenger Power Seat Recline Motor Rearward Control | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M63 Sliding Rear Window Motor (A48)



2716333

## Connector Part Information

Harness Type: Body
OEM Connector: 13863838
Service Connector: 19301518
Description: 2-Way F 2.8 Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M63 Sliding Rear Window Motor (A48)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | YE/BU | 5442 | Endgate Window Regulator Up Signal | I | — |
| 2 | 2.5 | GY/GN | 5441 | Endgate Window Regulator Down Signal | I | — |

# M64 Starter Motor X2

—

## Connector Part Information

Harness Type: Starter Motor
OEM Connector: Not Available
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way Ring Terminal

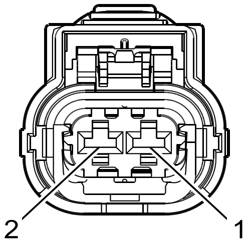
## Terminal Part Information

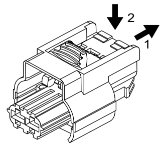
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M64 Starter Motor X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | — | RD/YE | 2 | Battery Positive Voltage | I | — |

# M64 Starter Motor X1 (L3B)





4992524

## Connector Part Information

Harness Type: Engine
OEM Connector: 35050650
Service Connector: 19371194
Description: 2-Way F 2.8 CTS Series, Sealed (BK)

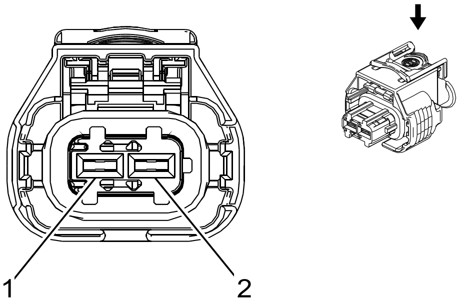
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M64 Starter Motor X1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | I | L3B+KL9 |
| 2 | 2.5 | YE/GN | 4358 | Starter Pinion Solenoid Voltage | I | L3B+KL9 |

# M64 Starter Motor X1 (L84/L87)



2577394

## Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

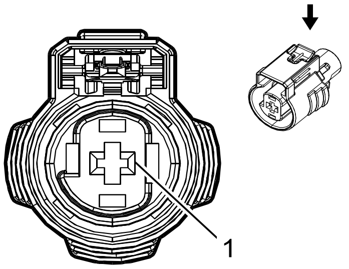
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M64 Starter Motor X1 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | I | — |
| 2 | 2.5 | YE/GN | 4358 | Starter Pinion Solenoid Voltage | I | — |

# M64 Starter Motor X1 (LM2/LV3/L82)



2717134

## Connector Part Information

Harness Type: Engine
OEM Connector: 15526411
Service Connector: 19300471
Description: 1-Way F 2.8 MCP Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M64 Starter Motor X1 (LM2/LV3/L82)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | YE | 6 | Starter Solenoid Crank Ignition Voltage | I | — |

# M69 Sunroof Motor (CF5)

—

## Connector Part Information

Harness Type: Sunroof Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F

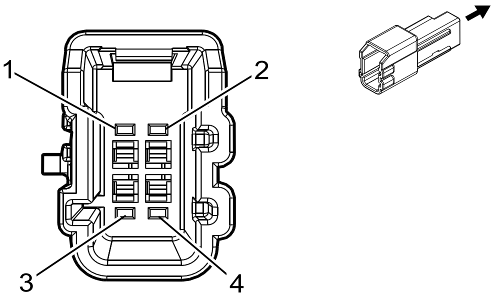
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M69 Sunroof Motor (CF5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | RD/GN | 3140 | Battery Positive Voltage | I | — |
| 2 | — | BK | 1050 | Ground | I | — |
| 3 | — | BK/GY | 128 | Sunroof Switch Low Reference | I | — |
| 5 | — | GN/BN | 3031 | Sunroof Vent Switch Signal | I | — |
| 7 | — | BU/VT | 6132 | Local Interconnect Network Serial Data Bus 1 | I | — |
| 8 | — | WH/GN | 5027 | Sunroof Switch Data 1 Signal | I | — |

# M73A Seat Blower Motor - Driver Back (KQV)



4293695

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-7781
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (GY)

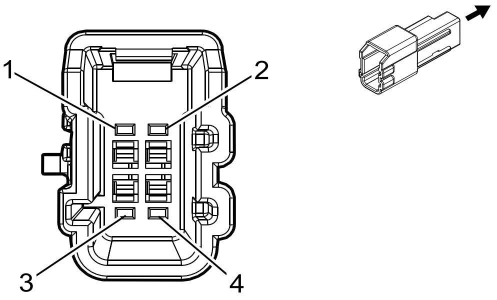
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-13 (BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M73A Seat Blower Motor - Driver Back (KQV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | VT/WH | 4939 | Run/Crank Ignition 1 Voltage | I | — |
| 2 | 0.5 | GN/VT | 5906 | Driver Seat Vent Motor Control 1 | I | — |
| 3 | 0.75 | BK | 1150 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M73B Seat Blower Motor - Passenger Back (KQV)



4293695

## Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 6098-7781
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (GY)

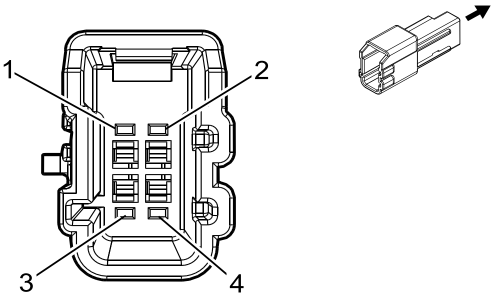
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-13 (BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M73B Seat Blower Motor - Passenger Back (KQV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | VT/WH | 4939 | Run/Crank Ignition 1 Voltage | I | — |
| 2 | 0.5 | WH | 5908 | Passenger Seat Vent Motor Control 1 | I | — |
| 3 | 0.75 | BK | 1250 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M73C Seat Blower Motor - Driver Cushion (KQV)



4293695

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 6098-7781
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.2 Series (GY)

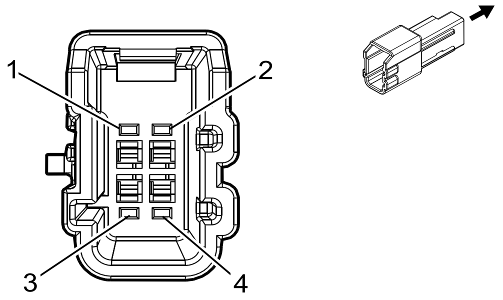
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-13 (BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M73C Seat Blower Motor - Driver Cushion (KQV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | VT/WH | 4939 | Run/Crank Ignition 1 Voltage | I | — |
| 2 | 0.5 | GN/VT | 5906 | Driver Seat Vent Motor Control 1 | I | — |
| 3 | 0.75 | BK | 1150 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M73D Seat Blower Motor - Passenger Cushion (KQV)



4293695

## Connector Part Information

Harness Type: Passenger Seat

OEM Connector: 6098-7781

Service Connector: Service by Harness - See Part Catalog

Description: 4-Way M 1.2 Series (GY)

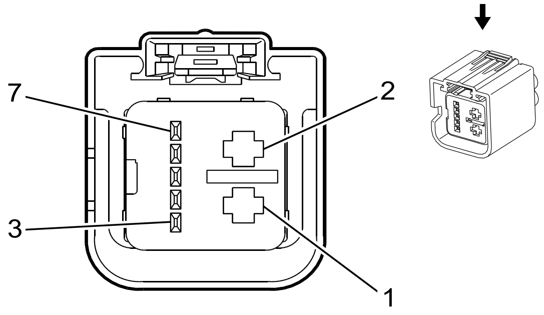
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-13 (BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M73D Seat Blower Motor - Passenger Cushion (KQV)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | VT/WH | 4939 | Run/Crank Ignition 1 Voltage | I | — |
| 2 | 0.5 | WH | 5908 | Passenger Seat Vent Motor Control 1 | I | — |
| 3 | 0.75 | BK | 1250 | Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# M74D Window Motor - Driver (AXG)



2282932

## Connector Part Information

Harness Type: Driver Door
OEM Connector: 15504732
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed (BK)

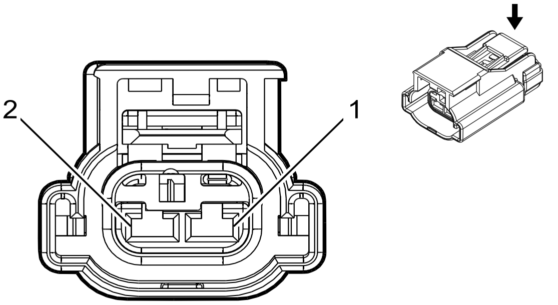
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M74D Window Motor - Driver (AXG)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1150 | Ground | I | — |
| 2 | 2.5 | RD/BU | 1842 | Battery Positive Voltage | I | — |
| 3 | 0.35 | GN/WH | 3379 | Power Window Switch Driver Up Signal | II | — |
| 4 | 0.5 | GN/YE | 6134 | Local Interconnect Network Serial Data Bus 3 | II | — |
| 5 | 0.35 | GN | 3381 | Power Window Switch Driver Express Signal | II | — |
| 6 | 0.35<br>0.5 | GY<br>PK | 745<br>745 | Left Front Door Ajar Switch Signal<br>Left Front Door Ajar Switch Signal | II<br>II | A6Q<br>AXG |
| 7 | 0.35<br>0.5 | GY<br>GY | 3380<br>3380 | Power Window Switch Driver Down Signal<br>Power Window Switch Driver Down Signal | II<br>II | A6Q<br>AXG |

## M74LR Window Motor - Left Rear (AEQ)



2716333

### Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 13863838
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

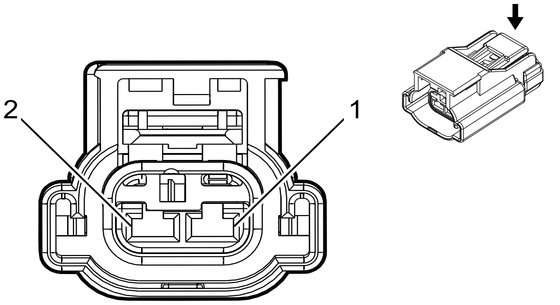
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### M74LR Window Motor - Left Rear (AEQ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2 | BU/VT | 668 | Power Window Motor Left Rear Up Control | I | — |
| 2 | 2 | YE/BU | 669 | Power Window Motor Left Rear Down Control | I | — |

# M74P Window Motor - Passenger (AED)



2716333

## Connector Part Information

Harness Type: Passenger Door
OEM Connector: 13863838
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

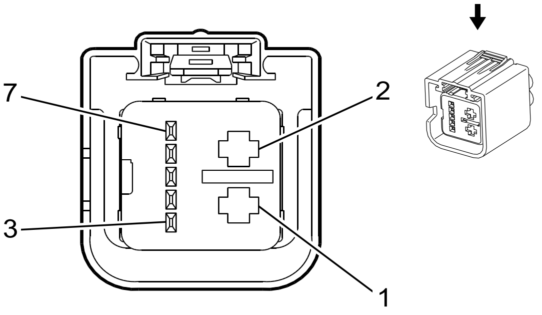
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### M74P Window Motor - Passenger (AED)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5<br>2<br>1.5 | GN/GY<br>GN/GY<br>GN/GY | 3387<br>3387<br>3387 | Power Window Motor Passenger Up Control<br>Power Window Motor Passenger Up Control<br>Power Window Motor Passenger Up Control | I<br>I<br>I | AED<br>EXTENDED/ CREW CAB<br>REGULAR CAB |
| 2 | 2 | YE/BU | 3388 | Power Window Motor Passenger Down Control | I | — |

## M74P Window Motor - Passenger (AEF)



2282932

### Connector Part Information

Harness Type: Passenger Door
OEM Connector: 15504732
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 0.64, 2.8 Kaizen Timer Series, Sealed (BK)

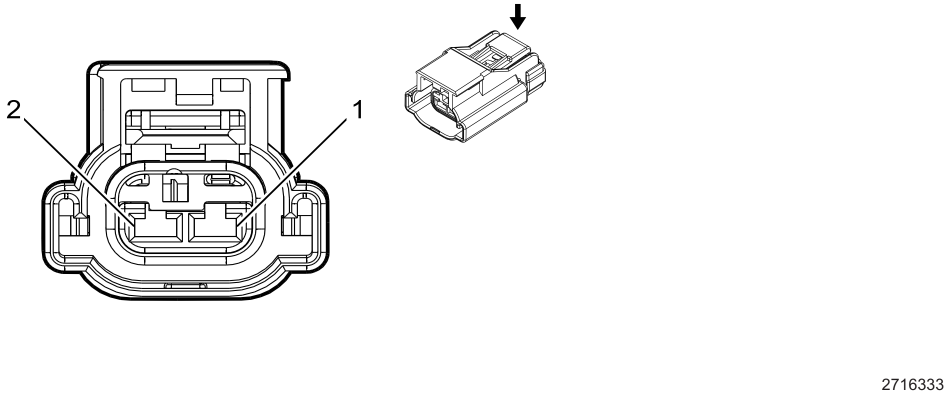
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### M74P Window Motor - Passenger (AEF)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1250 | Ground | I | — |
| 2 | 2.5 | RD/WH | 1340 | Battery Positive Voltage | I | — |
| 3 | 0.35 | YE/BK | 3384 | Power Window Switch Passenger Up Signal | II | — |
| 4 | 0.35 | GN/YE | 6134 | Local Interconnect Network Serial Data Bus 3 | II | — |
| 5 | 0.35 | VT/GY | 3386 | Power Window Switch Passenger Express Signal | II | — |
| 6 | 0.5 | GY | 746 | Right Front Door Ajar Switch Signal | II | — |
| 7 | 0.5 | BN/YE | 3385 | Power Window Switch Passenger Down Signal | II | — |

# M74RR Window Motor - Right Rear (AEQ)



## Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 13863838
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

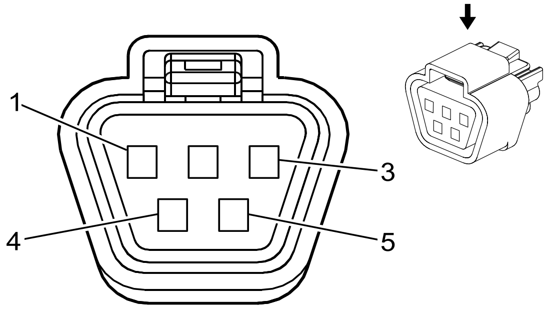
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M74RR Window Motor - Right Rear (AEQ)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2 | BU/GY | 670 | Power Window Motor Right Rear Up Control | I | — |
| 2 | 2 | GN/BK | 671 | Power Window Motor Right Rear Down Control | I | — |

## M75 Windshield Wiper Motor



1715213

### Connector Part Information

Harness Type: Body
OEM Connector: 15316488
Service Connector: 13587179
Description: 5-Way F 090 Series, Sealed (BK)

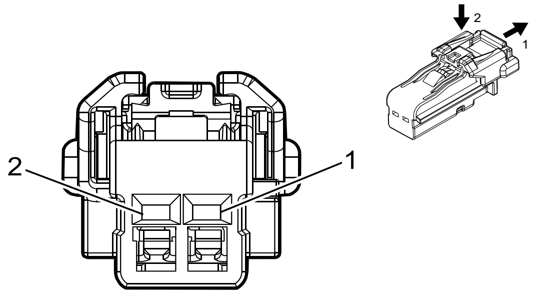
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-18 (BK) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### M75 Windshield Wiper Motor

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2 | YE/BN | 95 | Windshield Wiper Motor Low Speed Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | BN/GN | 196 | Windshield Wiper Motor Park Switch Signal | I | — |
| 4 | 2 | WH | 92 | Windshield Wiper Motor High Speed Control | I | — |
| 5 | 2 | BK | 150 | Ground | I | — |

# M93 Key Capture Solenoid Actuator (-BTM)



4115691

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M93 Key Capture Solenoid Actuator (-BTM)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | VT/GY | 1630 | Steering Column Key Cylinder Lock Solenoid Control | I | — |
| 2 | 0.35 | BK | 1850 | Ground | I | — |

# M95L Assist Step - Left (BRS)

—

## Connector Part Information

Harness Type: Left Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M95L Assist Step - Left (BRS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | OG/ | 7471 | Articulating Running Boards Motor Left Control Extend | I | — |
| 2 | — | OG/WH | 7468 | Running Boards Motor Hall Sensor Left 5V Reference | I | — |
| 3 | — | YE/ | 7472 | Articulating Running Boards Motor Left Control Retract | I | — |
| 4 | — | YE/WH | 7467 | Running Boards Motor Hall Sensor Left Signal | I | — |
| 7 | — | BN/WH | 7466 | Running Boards Motor Hall Sensor Left Low Reference | I | — |

# M95R Assist Step - Right (BRS)

—

## Connector Part Information

Harness Type: Right Step Assist Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 5-Way

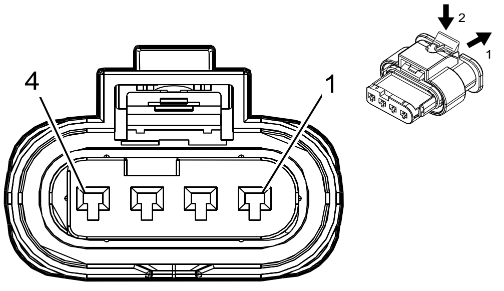
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M95R Assist Step - Right (BRS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | OG/ | 7470 | Articulating Running Boards Motor Right Control Extend | I | — |
| 2 | — | OG/WH | 7464 | Running Boards Motor Hall Sensor Right 5V Reference | I | — |
| 3 | — | YE/ | 7469 | Articulating Running Boards Motor Right Control Retract | I | — |
| 4 | — | YE/WH | 7465 | Running Boards Motor Hall Sensor Right Signal | I | — |
| 7 | — | BN/WH | 7463 | Running Boards Motor Hall Sensor Right Low Reference | I | — |

# M96A Active Grille Air Shutter 1 Actuator (VTI/WMI)



4256124

## Connector Part Information

Harness Type: Active Grille Air Shutter 1 Actuator Jumper
OEM Connector: 13594673
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON Series (BK)

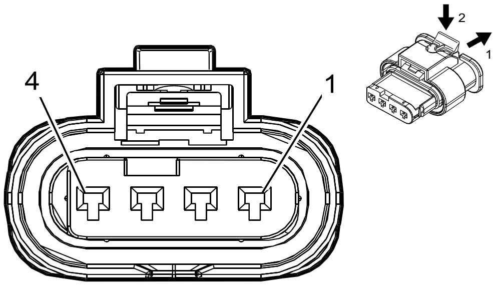
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M96A Active Grille Air Shutter 1 Actuator (VTI/WMI)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | VT/BU | 5705 | Powertrain Main Relay Fused Control 6 | I | — |
| 2 | — | GN/VT | 4621 | Local Interconnect Network Serial Data Bus 21 | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | — | BK | 4450 | Ground | I | — |

## M96B Active Grille Air Shutter 2 Actuator (WMI)



4256124

### Connector Part Information

Harness Type: Active Grille Air Shutter 2 Actuator Jumper
OEM Connector: 13594673
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 1.2 MCON Series (BK)

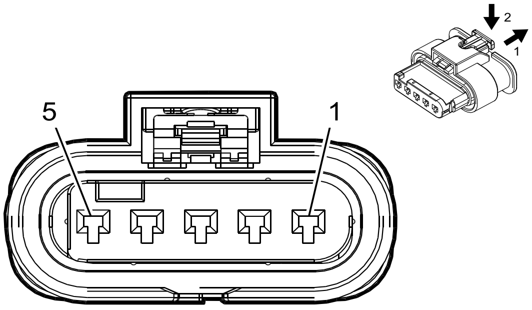
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### M96B Active Grille Air Shutter 2 Actuator (WMI)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | VT/BU | 5705 | Powertrain Main Relay Fused Control 6 | I | — |
| 2 | — | GN/VT | 4621 | Local Interconnect Network Serial Data Bus 21 | I | — |
| 3 | — | BK | 4450 | Ground | I | — |
| 4 | — | BK | 4450 | Ground | I | — |

# M103 Turbocharger Vane Position Actuator (LM2)



3338689

## Connector Part Information

Harness Type: Engine
OEM Connector: 13943325
Service Connector: 19119351
Description: 5-Way F 1.2 MCON-LL Series, Sealed (BK)

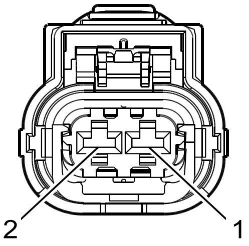
## Terminal Part Information

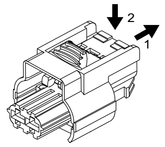
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M103 Turbocharger Vane Position Actuator (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | WH/BN | 1313 | Variable Geometry Turbocharger Position Sensor Motor Open Control | I | — |
| 2 | 0.5 | VT/YE | 5947 | Variable Nozzle Turbo Position Sensor Signal | I | — |
| 3 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |
| 4 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 5 | 0.75 | GY/BK | 1330 | Variable Geometry Turbocharger Position Sensor Motor Close Control | I | — |

# M104L Park Brake Actuator - Left





4992524

## Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 13522815
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 CTS Series, Sealed (BK)

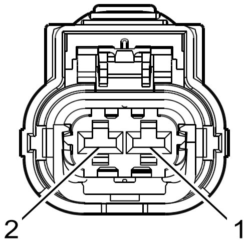
## Terminal Part Information

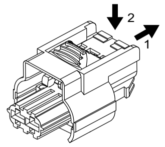
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M104L Park Brake Actuator - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | WH | 2001 | Park Brake Motor Apply Left Rear Control | I | — |
| 2 | 2.5 | OG | 4369 | Park Brake Motor Low Reference Left Rear | I | — |

# M104R Park Brake Actuator - Right





4992524

## Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 13522815
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 CTS Series, Sealed (BK)

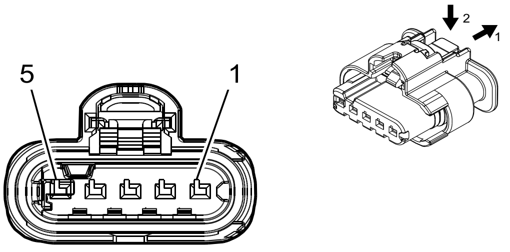
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M104R Park Brake Actuator - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | OG | 1988 | Park Brake Motor Apply Right Rear Control | I | — |
| 2 | 2.5 | WH | 4368 | Park Brake Motor Low Reference Right Rear | I | — |

## M106 Exhaust Flow Control Valve Actuator (LM2)



4997783

### Connector Part Information

Harness Type: Engine
OEM Connector: 35026727
Service Connector: 19371195
Description: 5-Way F 1.2 MCON-CB Series, Sealed (BK)

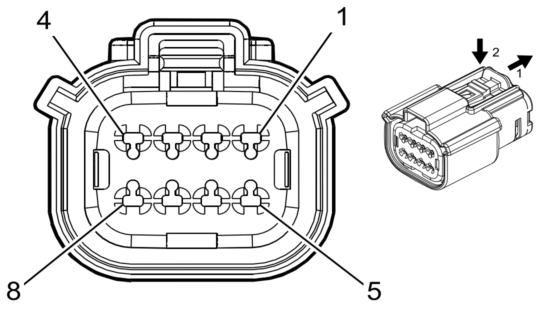
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### M106 Exhaust Flow Control Valve Actuator (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 2 | 0.5 | BN/GN | 4305 | Exhaust Flapper Valve Control 1 | I | — |
| 3 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 4 | 0.75 | BN | 1421 | Exhaust Restrictor Motor Closed Control | I | — |
| 5 | 0.75 | YE/BN | 1420 | Exhaust Restrictor Motor Open Control | I | — |

# M125 Pickup Box Endgate Power Assist Actuator



4846407

## Connector Part Information

Harness Type: Endgate
OEM Connector: 35037827
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F 150 MX Series, Sealed (BK)

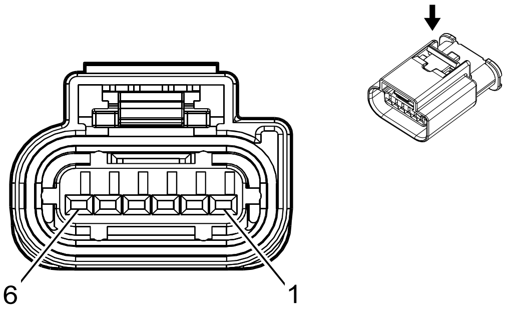
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### M125 Pickup Box Endgate Power Assist Actuator

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BN/WH | 4690 | Rear Closure Open/Close Motor Close Control | I | — |
| 2 | 0.5 | GN | 1577 | Rear Closure Clutch Control | I | — |
| 3 | 0.5 | OG/WH | 1590 | Rear Closure Clutch Return | I | — |
| 4 | 0.5 | BN/RD | 4683 | Rear Closure Position Sensor Voltage Reference | I | — |
| 5 | 1 | WH | 4689 | Rear Closure Open/Close Motor Open Control | I | — |
| 6 | 0.35 | BN/YE | 4686 | Rear Closure Position Sensor Signal 2 | I | — |
| 7 | 0.35 | BK/GN | 4687 | Rear Closure Position Sensor Low Reference | I | — |
| 8 | 0.5 | BU/WH | 4685 | Rear Closure Position Sensor Signal 1 | I | — |

# M128 Turbocharger Wastegate Actuator (L3B)



3747579

## Connector Part Information

Harness Type: Engine
OEM Connector: 33220833
Service Connector: 19352911
Description: 6-Way F 1.2 MCON Series, Sealed (BK)

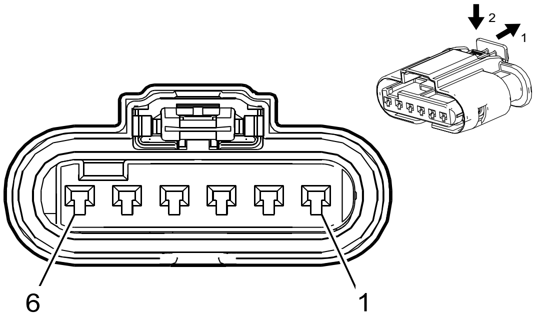
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M128 Turbocharger Wastegate Actuator (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 2 | 0.5 | WH | 2590 | Turbo Charger Wastegate Motor Feedback Signal | I | — |
| 3 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 4 | 0.75 | WH/BU | 2592 | Turbo Charger Wastegate Motor Close Control | I | — |
| 5 | 0.75 | WH/BN | 2591 | Turbo Charger Wastegate Motor Open Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |

## M129A Intake Camshaft Profile Actuator 1 (L3B)



3960142

### Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

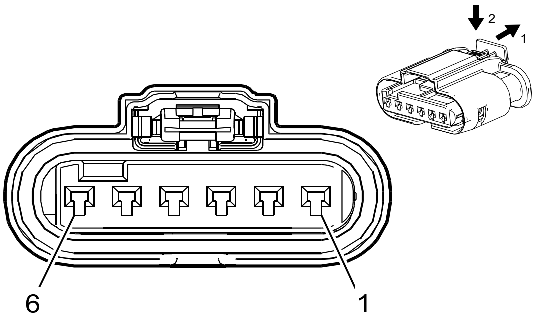
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### M129A Intake Camshaft Profile Actuator 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/GY | 3615 | Step Cam A Control | I | — |
| 2 | 0.5 | BU/WH | 3589 | Camshaft Stepper Position Sensor 1 Signal | I | — |
| 3 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 4 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 5 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 6 | 0.5 | GN/BK | 3616 | Step Cam B Control | I | — |

# M129B Intake Camshaft Profile Actuator 2 (L3B)



3960142

## Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

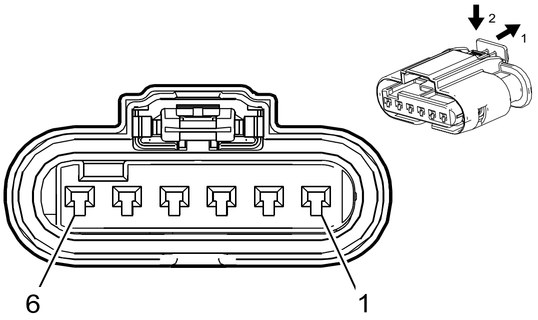
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M129B Intake Camshaft Profile Actuator 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 3584 | Camshaft Stepper A Control | I | — |
| 2 | 0.5 | GN/WH | 3592 | Camshaft Stepper Position Sensor 2 Signal | I | — |
| 3 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 4 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 5 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 6 | 0.5 | GN | 3585 | Camshaft Stepper B Control | I | — |

## M129C Intake Camshaft Profile Actuator 3 (L3B)



3960142

### Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

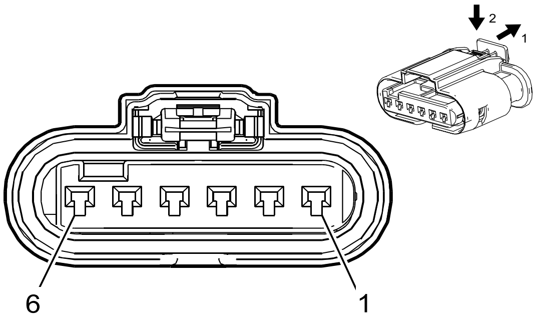
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### M129C Intake Camshaft Profile Actuator 3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/BU | 3587 | Camshaft Stepper D Control | I | — |
| 2 | 0.5 | WH | 924 | — | I | — |
| 3 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 4 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 5 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 6 | 0.5 | GY | 3586 | Camshaft Stepper C Control | I | — |

# M129D Intake Camshaft Profile Actuator 4 (L3B)



3960142

## Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

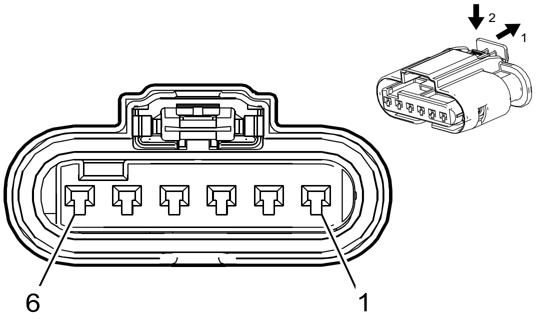
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M129D Intake Camshaft Profile Actuator 4 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/GN | 927 | Step Cam A Control | I | — |
| 2 | 0.5 | BU/BK | 928 | Camshaft Stepper Position Sensor #4 Signal | I | — |
| 3 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 4 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 5 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 6 | 0.5 | BU | 926 | Step Cam B Control | I | — |

# M130B Exhaust Camshaft Profile Actuator 2 (L3B)



3960142

## Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

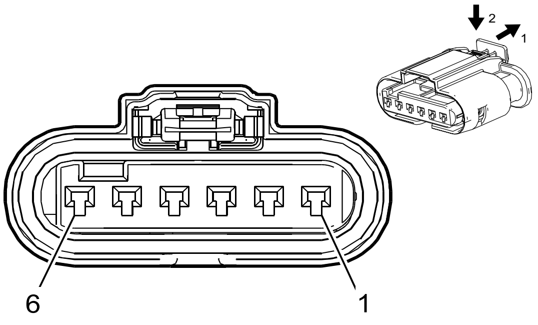
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## M130B Exhaust Camshaft Profile Actuator 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/VT | 6265 | Camshaft CAM W Signal | I | — |
| 2 | 0.5 | BU | 932 | Camshaft Stepper Position Sensor Signal | I | — |
| 3 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 4 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 5 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 6 | 0.5 | VT/BK | 6264 | Camshaft CAM X Signal | I | — |

# M130C Exhaust Camshaft Profile Actuator 3 (L3B)



3960142

## Connector Part Information

Harness Type: Engine
OEM Connector: 33230495
Service Connector: 19353874
Description: 6-Way F 1.2 MCON-LL Series, Sealed (BK)

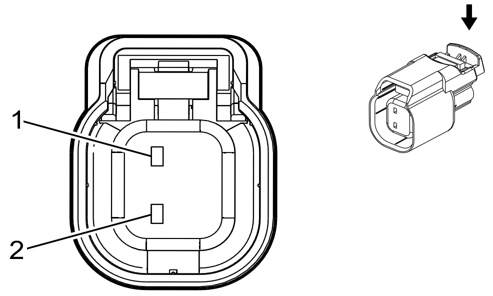
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### M130C Exhaust Camshaft Profile Actuator 3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/BN | 6262 | Camshaft CAM Z Signal | I | — |
| 2 | 0.5 | GY/BN | 933 | Camshaft Stepper Position Sensor Signal | I | — |
| 3 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 4 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 5 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 6 | 0.5 | GN/BN | 6261 | Camshaft CAM Z Control | I | — |

# P12 Horn



2792100

## Connector Part Information

Harness Type: Body
OEM Connector: 13828712
Service Connector: 19300543
Description: 2-Way F 1.5 Series, Sealed (BK)

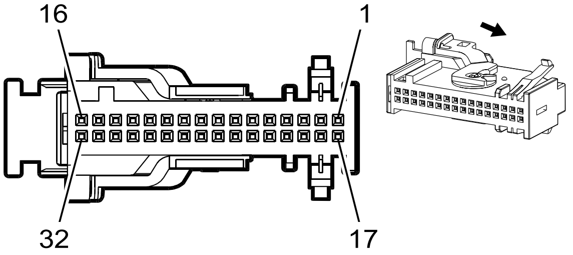
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P12 Horn

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 250 | Ground | I | — |
| 2 | 0.75 | BN/GY | 29 | Horn Control | I | — |

# P16 Instrument Cluster X1



627214

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12198036
Service Connector: 88988405
Description: 32-Way F 0.64 Micro-Quadlock Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13579993 | J-35616-64B (LT BU) | J-38125-12A | 144969-1 | Lear 25 | E | 2 |

## P16 Instrument Cluster X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BN/BU | 7216 | Ethernet Bus 7 (-) | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | GY/GN | 1102 | Low Speed GMLAN Serial Data #2 | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35 | RD/GY | 2840 | Battery Positive Voltage | I | — |
| 8 | 0.35 | VT/BK | 1639 | Run/Crank Ignition 1 Voltage | I | — |
| 9 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | GY/BK | 4787 | Day Night LED Control | I | — |
| 12 | 0.35 | GY/YE | 3885 | Forward Collision Alert LED Control | I | — |
| 13 | 0.35 | BU/GN | 1304 | High Speed GMLAN Serial Data (+)9 | I | — |
| 14 | 0.35 | WH/GN | 1305 | High Speed GMLAN Serial Data (-)9 | I | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.35 | BN/WH | 419 | Check Engine Indicator Control | I | — |
| 17 | 0.35 | GY/BU | 7217 | Ethernet Bus 7 (+) | I | — |
| 18 | — | — | — | Not Occupied | — | — |
| 19 | 0.35 | BK/WH | 1851 | Signal Ground | I | — |
| 20 | 0.35 | GN/BK | 3894 | Local Interconnect Network Serial Data Bus 12 | I | — |
| 21 - 22 | — | — | — | Not Occupied | — | — |
| 23 | 0.35 | WH/BU | 5986 | Serial Data Communication Enable | I | — |
| 24 | 0.35 | VT | 185 | Low Washer Fluid Indicator Control | I | — |
| 25 - 28 | — | — | — | Not Occupied | — | — |

## P16 Instrument Cluster X1 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 29 | 0.35 | BU/GN | 1304 | High Speed GMLAN Serial Data (+)9 | I | — |
| 30 | 0.35 | WH/GN | 1305 | High Speed GMLAN Serial Data (-)9 | I | — |
| 31 | — | — | — | Not Occupied | — | — |
| 32 | 0.35 | GN/BN | 507 | Wait To Start Indicator Control | I | — |

# P16 Instrument Cluster X2 (UV6)

—

### Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13585112
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type

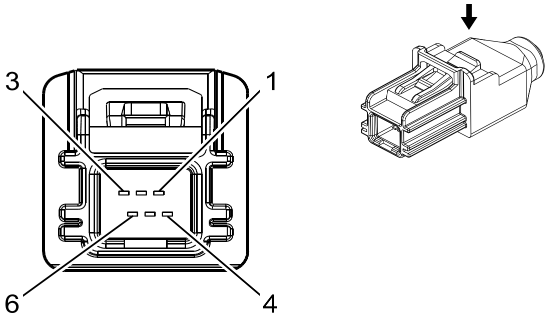
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P16 Instrument Cluster X2 (UV6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| GY | — | — | LVDS | LVDS Cable | I | — |

# P17 Info Display Module X2



4806625

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13522802
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M HSAL-2 Series (BK)

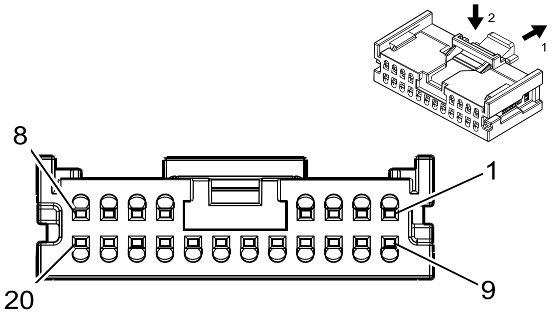
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P17 Info Display Module X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 6 | — | — | — | Not Occupied | — | — |
| BK | — | — | LVDS | LVDS Cable | I | — |

# P17 Info Display Module X1 (UIR)



4231339

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33167777
Service Connector: 13596105
Description: 20-Way F Mini 50 Series (BK)

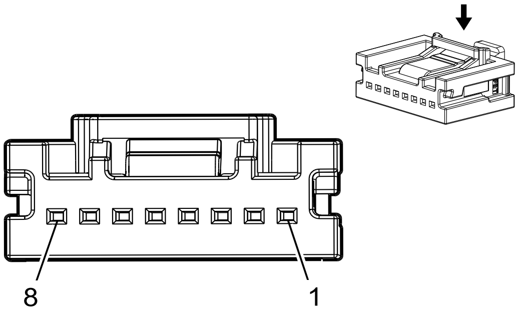
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19333221 | EL-35616-58 (BK) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## P17 Info Display Module X1 (UIR)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU/RD | 2807 | Radio Keypad Voltage Reference | I | — |
| 2 | 0.35 | GY/BU | 2803 | Radio Display Touch Interrupt Request Signal | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.35 | BU | 4315 | Radio Volume Up Signal | I | — |
| 5 | 0.35 | GY/BN | 4314 | Radio Volume Down Signal | I | — |
| 6 | 0.35 | BN/WH | 2809 | Radio Keypad Power Signal | I | — |
| 7 | 0.35 | VT/WH | 2810 | Radio Keypad Button Signal | I | — |
| 8 | 0.35 | BU/GY | 2808 | Radio Keypad Dimming Control | I | — |
| 9 | 0.35 | BU/GN | 2813 | Radio Display Backlight Dimming Control | I | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | BK/GN | 2804 | Radio Display Backlight Low Reference | I | — |
| 12 | 0.35 | BU/RD | 2807 | Radio Keypad Voltage Reference | I | — |
| 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.35 | BU | 4315 | Radio Volume Up Signal | I | — |
| 15 | 0.35 | GY/BN | 4314 | Radio Volume Down Signal | I | — |
| 16 | 0.35 | BN/WH | 2809 | Radio Keypad Power Signal | I | — |
| 17 | 0.35 | VT/WH | 2810 | Radio Keypad Button Signal | I | — |
| 18 | 0.35 | BU/GY | 2808 | Radio Keypad Dimming Control | I | — |
| 19 | 0.35 | GY/VT | 3363 | Navigation Display Dimming Control | I | — |
| 20 | 0.35 | BK/YE | 2806 | Radio Keypad Low Reference | I | — |

# P17 Info Display Module X1 (UIJ/UIK)



4017639

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33227522
Service Connector: 19354223
Description: 8-Way F Mini 50 Series (BK)

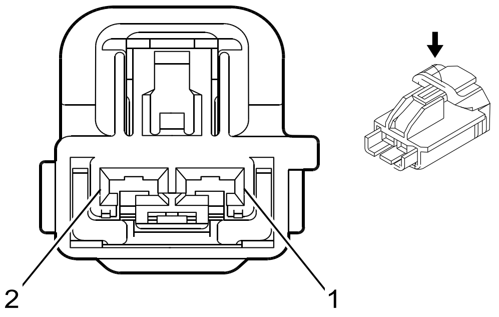
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | EL-35616-58 (BK) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P17 Info Display Module X1 (UIJ/UIK)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD/WH | 1340 | Battery Positive Voltage | I | — |
| 2 - 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | BK/WH | 2751 | Signal Ground | I | — |

# P19AC Speaker - Subwoofer (UQA)



1803142

## Connector Part Information

Harness Type: Body
OEM Connector: 10846819
Service Connector: 19367562
Description: 2-Way F YESC Kaizen Series (L-GY)

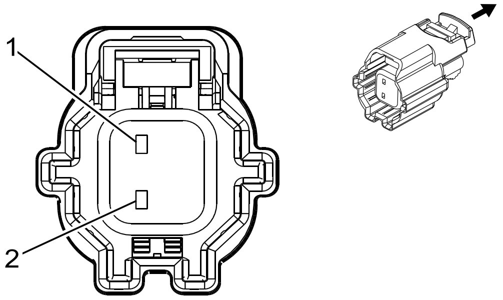
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P19AC Speaker - Subwoofer (UQA)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | GN/BK | 1794 | Left/Rear Subwoofer Speaker (-) Low Reference | I | — |
| 2 | 2.5 | BU/GY | 346 | Left/Rear Subwoofer Speaker Control (+) | I | — |

## P19AG Speaker - Left Front Door



4223204

### Connector Part Information

Harness Type: Driver Door
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series (BK)

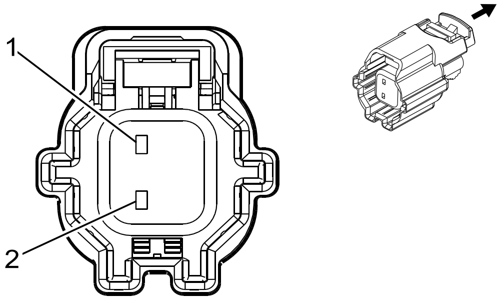
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### P19AG Speaker - Left Front Door

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN/BU | 118 | Left Front Speaker Signal (-) 1 | I | — |
| 2 | 0.75 | BU | 201 | Left Front Speaker Control (+) 1 | I | — |

# P19AH Speaker - Right Front Door (U95/UQF/UQA)



4223204

## Connector Part Information

Harness Type: Passenger Door
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series (BK)

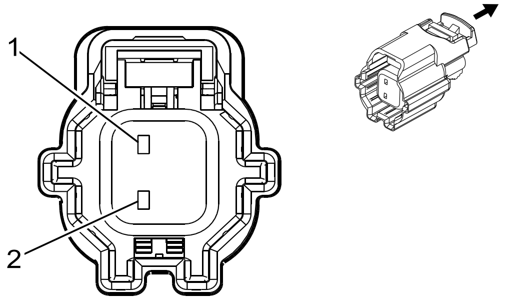
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P19AH Speaker - Right Front Door (U95/UQF/UQA)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | YE/BK | 117 | Right Front Speaker Signal (-) 1 | I | — |
| 2 | 0.75 | YE | 200 | Right Front Speaker Control (+) 1 | I | — |

# P19AL Speaker - Left Rear Door (UQA/UQF)



4223204

## Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series (BK)

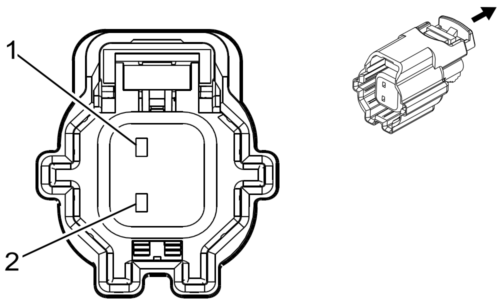
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P19AL Speaker - Left Rear Door (UQA/UQF)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/BK | 116 | Left Rear Speaker Signal (-) | I | — |
| 2 | 0.5 | GN | 199 | Left Rear Speaker Control (+) | I | — |

## P19AM Speaker - Right Rear Door (UQA/UQF)



4223204

### Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 15548606
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series (BK)

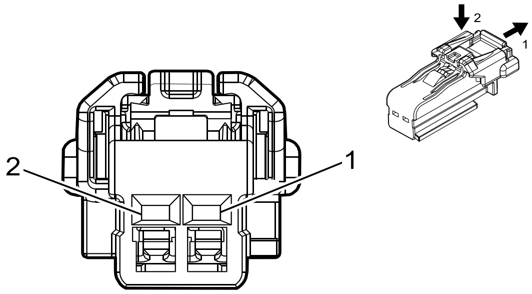
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### P19AM Speaker - Right Rear Door (UQA/UQF)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/BK | 115 | Right Rear Speaker Signal (-) | I | — |
| 2 | 0.5 | WH | 46 | Right Rear Speaker Control (+) | I | — |

# P19J Speaker - Left Instrument Panel (UQA)



4373379

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35034269
Service Connector: 19369632
Description: 2-Way F 1.2 Series (GY)

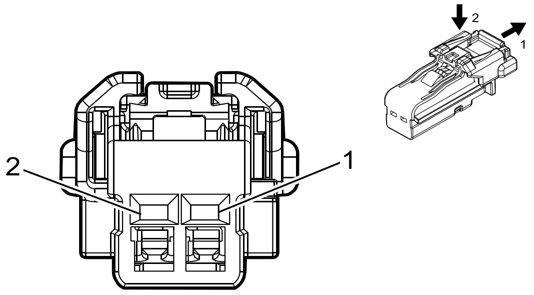
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P19J Speaker - Left Instrument Panel (UQA)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU/BN | 1957 | Left Front Midrange Speaker (-) Low Reference | I | — |
| 2 | 0.75 | BU/VT | 1857 | Left Front Midrange Speaker Control (+) | I | — |

# P19J Speaker - Left Instrument Panel (UQF/U95)



4115691

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

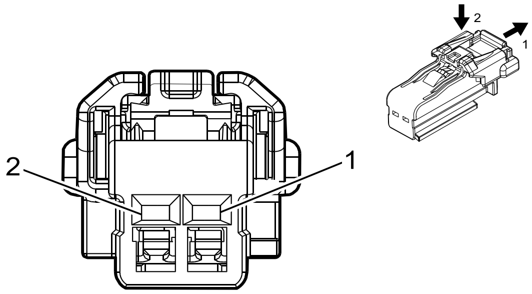
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P19J Speaker - Left Instrument Panel (UQF/U95)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN/BU | 118 | Left Front Speaker Signal (-) 1 | I | — |
| 2 | 0.75 | BU | 201 | Left Front Speaker Control (+) 1 | I | — |

# P19W Speaker - Right Instrument Panel (UQA)



4373379

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35034269
Service Connector: 19369632
Description: 2-Way F 1.2 Series (GY)

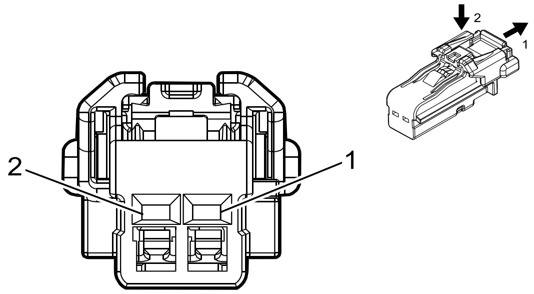
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P19W Speaker - Right Instrument Panel (UQA)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN/BK | 1953 | Right Front Midrange Speaker (-) Low Reference | I | — |
| 2 | 0.75 | WH/YE | 1853 | Right Front Midrange Speaker Control (+) | I | — |

# P19W Speaker - Right Instrument Panel (UQF/U95)



4115691

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

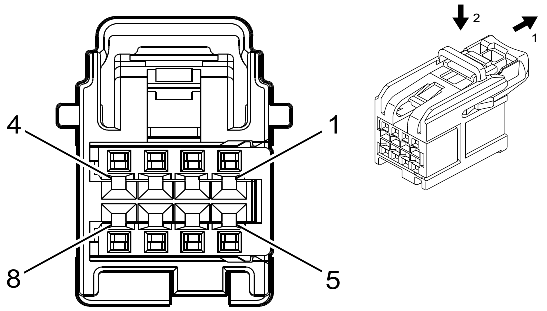
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P19W Speaker - Right Instrument Panel (UQF/U95)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | YE/BK | 117 | Right Front Speaker Signal (-) 1 | I | — |
| 2 | 0.75 | YE | 200 | Right Front Speaker Control (+) 1 | I | — |

## P29 Head-Up Display X1 (UV6)



4935776

### Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15526972
Service Connector: 19370429
Description: 8-Way F 0.64 OCS Series (BK)

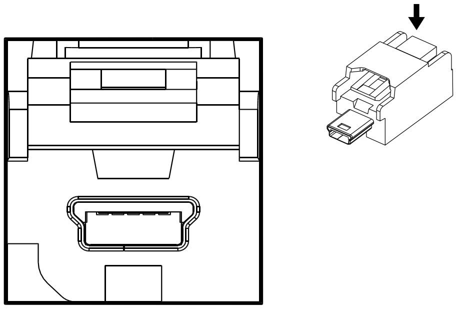
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### P29 Head-Up Display X1 (UV6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN/BK | 3894 | Local Interconnect Network Serial Data Bus 12 | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | YE/WH | 622 | Head Up Display Switch Signal | I | — |
| 4 | 0.35 | BK/WH | 1851 | Signal Ground | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | RD/WH | 1340 | Battery Positive Voltage | I | — |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.35 | BK/GN | 5699 | Head Up Display Switch Low Reference | I | — |

# P29 Head-Up Display X2 (UV6)



## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13584751
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type (GY)

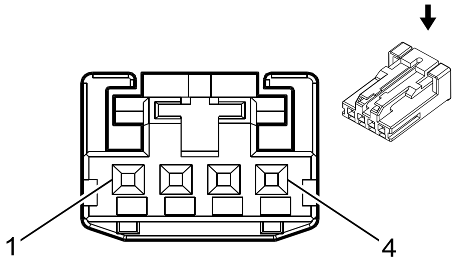
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P29 Head-Up Display X2 (UV6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| GY | — | — | LVDS | LVDS Cable | I | — |
| USB | — | — | — | Not Occupied | — | — |

## P43 Collision Alert Indicators ((UEU/UHX)-UV6)



2717162

### Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13969166
Service Connector: 13587297
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

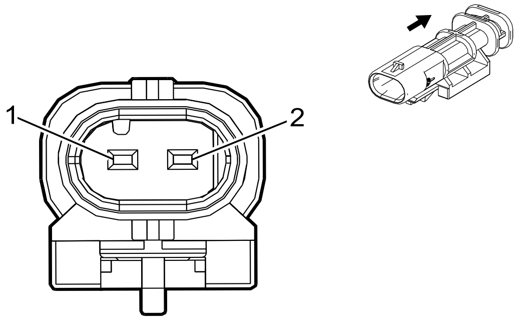
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### P43 Collision Alert Indicators ((UEU/UHX)-UV6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | VT/BK | 1639 | Run/Crank Ignition 1 Voltage | I | — |
| 2 | 0.35 | GY/YE | 3885 | Forward Collision Alert LED Control | I | — |
| 3 | 0.35 | GY/BK | 4787 | Day Night LED Control | I | — |
| 4 | 0.35 | BK/WH | 1851 | Signal Ground | I | — |

# P45LR Seat Haptic Movement Motor - Driver Left Rear (HS1)



2474755

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2203314-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 Multilock Series, Sealed (BK)

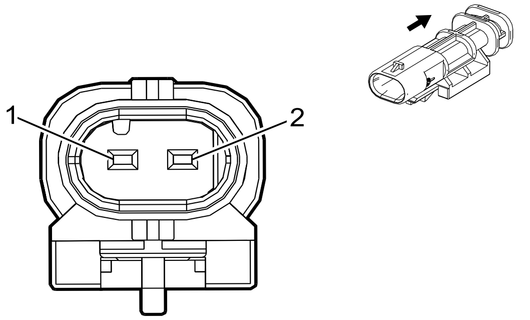
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P45LR Seat Haptic Movement Motor - Driver Left Rear (HS1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 1150 | Ground | I | — |
| 2 | 0.5 | YE/BN | 3037 | Left Rear Haptic Seat Motor Control | I | — |

# P45RR Seat Haptic Movement Motor - Driver Right Rear (HS1)



2474755

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 2203314-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 Multilock Series, Sealed (BK)

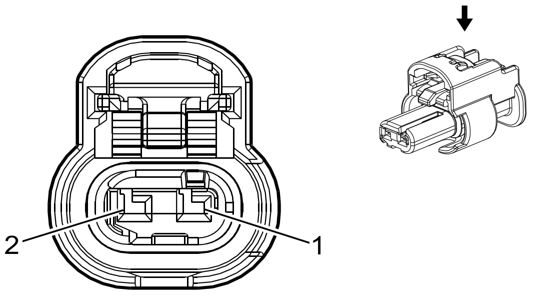
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## P45RR Seat Haptic Movement Motor - Driver Right Rear (HS1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 1150 | Ground | I | — |
| 2 | 0.5 | BN | 3038 | Right Rear Haptic Seat Motor Control | I | — |

# Q2 A/C Compressor Clutch (L3B/L3V)



4036662

## Connector Part Information

Harness Type: Engine
OEM Connector: 33121579
Service Connector: 19330898
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

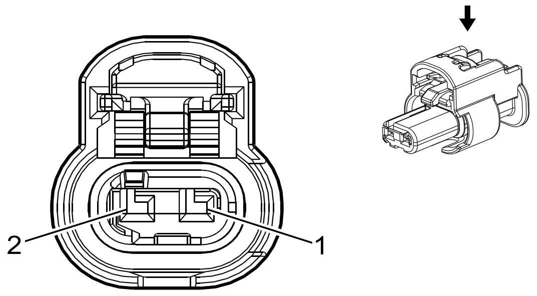
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q2 A/C Compressor Clutch (L3B/L3V)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 4450 | Ground | I | — |
| 2 | 0.5 | BN/GN | 59 | A/C Compressor Clutch Control | I | — |

# Q2 A/C Compressor Clutch (L82)



4690744

## Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

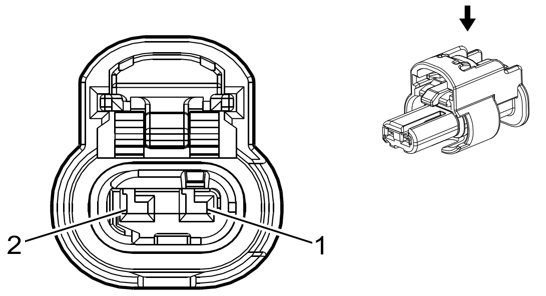
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q2 A/C Compressor Clutch (L82)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 4450 | Ground | I | — |
| 2 | 0.5 | BN/GN | 59 | A/C Compressor Clutch Control | I | — |

# Q2 A/C Compressor Clutch (LM2/L84/L87)



## Connector Part Information

Harness Type: Engine
OEM Connector: 33327048
Service Connector: 19366858
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

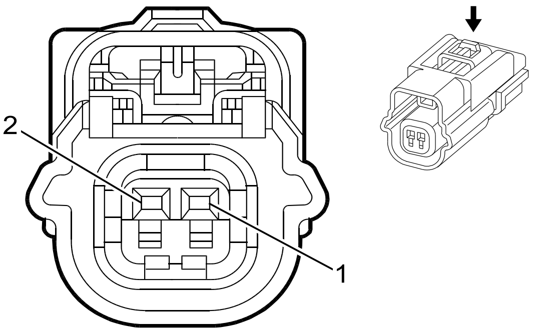
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q2 A/C Compressor Clutch (LM2/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | BK | 4450 | Ground | I | — |
| 2 | 0.5 | BN/GN | 59 | A/C Compressor Clutch Control | I | — |

# Q6 Camshaft Position Actuator Solenoid Valve (L82/L84/L87)



## Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 13528494
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 Kaizen Series, Sealed (BK)

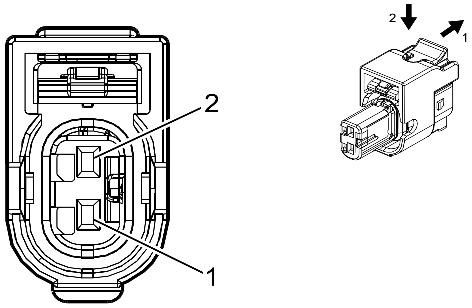
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q6 Camshaft Position Actuator Solenoid Valve (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/BN | 6753 | Cam Phaser W Low Reference | I | — |
| 2 | 0.5 | VT/BN | 5284 | Camshaft Phaser Intake Solenoid 1 | I | — |

# Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (L3B)



4994585

## Connector Part Information

Harness Type: Engine
OEM Connector: 33386202
Service Connector: 19371204
Description: 2-Way F 1.2 MCP Series, Sealed (BK)

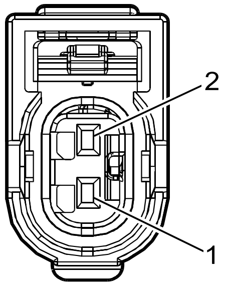
## Terminal Part Information

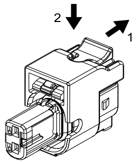
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q6E Camshaft Position Actuator Solenoid Valve - Exhaust (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/BU | 5282 | Camshaft Phaser Exhaust Solenoid 1 | I | — |
| 2 | 0.5 | BK/VT | 6754 | Cam Phaser X Low Reference | I | — |

# Q6F Camshaft Position Actuator Solenoid Valve - Intake (L3B)





4994585

## Connector Part Information

Harness Type: Engine
OEM Connector: 33386202
Service Connector: 19371204
Description: 2-Way F 1.2 MCP Series, Sealed (BK)

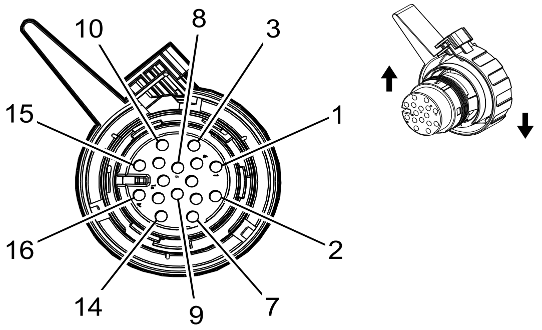
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q6F Camshaft Position Actuator Solenoid Valve - Intake (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BN | 5284 | Camshaft Phaser Intake Solenoid 1 | I | — |
| 2 | 0.5 | BK/BN | 6753 | Cam Phaser W Low Reference | I | — |

# Q8 Control Solenoid Valve Assembly X1 (MYC)



3277917

## Connector Part Information

Harness Type: Engine
OEM Connector: 13878751
Service Connector: 19303772
Description: 16-Way F 1.5 Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575434 | J-35616-66 (YE) | J-38125-28 | 2 21 24 47220 0 | Yazaki 12 | E | 1 |
| II | 13578934 | J-35616-66 (YE) | J-38125-28 | 2 21 24 47220 0 | Yazaki 12 | E | 1 |

## Q8 Control Solenoid Valve Assembly X1 (MYC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | RD/GN | 1840 | Battery Positive Voltage | II | — |
| 2 | 0.75 | BK/WH | 451 | Signal Ground | II | — |
| 3 | 0.5 | WH/GY | 1786 | Transmission Park/Neutral Signal 1 | II | — |
| 4 | 0.75 | RD/GN | 1840 | Battery Positive Voltage | II | — |
| 5 | 0.75 | BK/WH | 451 | Signal Ground | II | — |
| 6 - 8 | — | — | — | Not Occupied | — | — |
| 9 | 0.5 | VT/YE | 5985 | Accessory Wakeup Serial Data | I | — |
| 10 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | — |
| 11 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | II | — |
| 12 | 0.5<br>0.5<br>0.5 | VT/BK<br>WH/GY<br>VT/BK | 2139<br>2139<br>2139 | Run/Crank Ignition 1 Voltage<br>Run/Crank Ignition 1 Voltage<br>Run/Crank Ignition 1 Voltage | II | NP0/NQH<br>NP0/NQH<br>-NP0-NQH |
| 13 | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | II | — |
| 14 | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | II | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.5 | BN/WH | 6354 | Output Speed High (Replicated TOS) Input Signal | II | — |

# Q8 Control Solenoid Valve Assembly X2 (MYC)

—

## Connector Part Information

Harness Type: Transmission Internal Mode Switch
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way

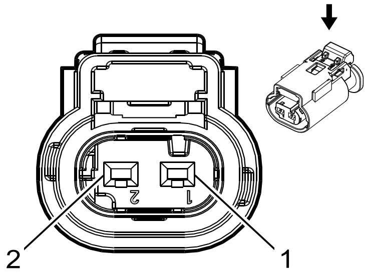
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q8 Control Solenoid Valve Assembly X2 (MYC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | — | GY | 50 | Ground | I | — |
| B | — | BK | 776 | Transmission Position Switch Parity Bit Signal | I | — |
| C | — | YE | 773 | Transmission Position Switch Bit 3 Signal | I | — |
| D | — | RD | 772 | Transmission Position Switch Bit 2 Signal | I | — |
| E | — | GN | 771 | Transmission Position Switch Bit 1 Signal | I | — |
| F | — | WH | 1786 | Transmission Park/Neutral Signal 1 | I | — |

## Q12 Evaporative Emission Purge Solenoid Valve (-LM2)



2717066

### Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

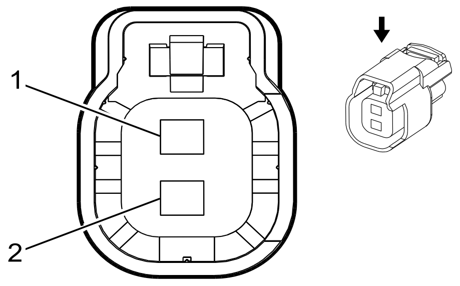
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q12 Evaporative Emission Purge Solenoid Valve (-LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 2 | 0.75 | GN/BU | 428 | EVAP Canister Purge Solenoid Control | I | L3B |
|  | 0.5 | GN/BU | 428 | EVAP Canister Purge Solenoid Control | I | L82/L84/L87 |

# Q13 Evaporative Emission Vent Solenoid Valve (-LM2)



2422378

## Connector Part Information

Harness Type: Chassis
OEM Connector: 13771883
Service Connector: 13579002
Description: 2-Way F 1.5 Series, Sealed (BK)

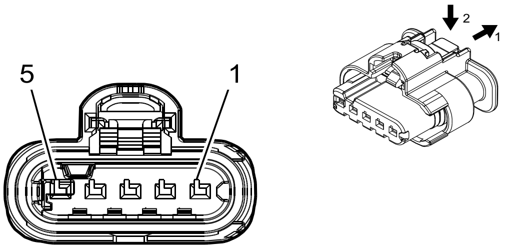
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q13 Evaporative Emission Vent Solenoid Valve (-LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 1310 | EVAP Canister Vent Solenoid Control | I | — |
| 2 | 0.5 | RD/WH | 2040 | Battery Positive Voltage | I | — |

# Q14A Exhaust Gas Recirculation Valve 1 (LM2)



4997783

## Connector Part Information

Harness Type: Engine
OEM Connector: 35026727
Service Connector: 19371195
Description: 5-Way F 1.2 MCON-CB Series, Sealed (BK)

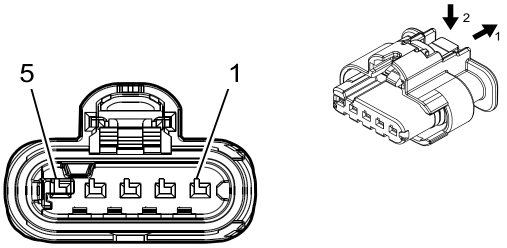
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q14A Exhaust Gas Recirculation Valve 1 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 2 | 0.5 | BN/WH | 5763 | Exhaust Gas Recirculation Valve Sensor Signal | I | — |
| 3 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 4 | 0.75 | WH/VT | 5764 | Exhaust Gas Recirculation Valve Motor High Signal | I | — |
| 5 | 0.75 | VT/BK | 5746 | Exhaust Gas Recirculation Valve Motor Low Signal | I | — |

# Q14B Exhaust Gas Recirculation Valve 2 (LM2)



4997783

## Connector Part Information

Harness Type: Engine
OEM Connector: 35026727
Service Connector: 19371195
Description: 5-Way F 1.2 MCON-CB Series, Sealed (BK)

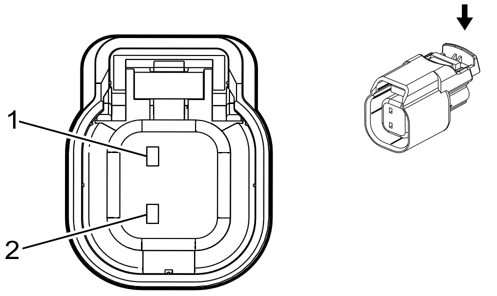
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q14B Exhaust Gas Recirculation Valve 2 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/YE | 548 | Engine Control Sensors Low Reference (1) | I | — |
| 2 | 0.5 | BU/GN | 4012 | Low Pressure Exhaust Gas Recirculation Actuator Position Signal | I | — |
| 3 | 0.5 | BU/RD | 460 | Engine Control Sensors 5 Volt Reference (1) | I | — |
| 4 | 0.75 | BU/WH | 4014 | Low Pressure Exhaust Gas Recirculation Actuator Control Open | I | — |
| 5 | 0.75 | BU/BN | 4013 | Low Pressure Exhaust Gas Recirculation Actuator Control Close | I | — |

# Q17A Fuel Injector 1 (L3B)



2792100

## Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

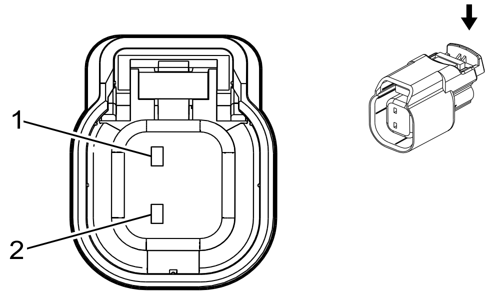
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17A Fuel Injector 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | BN | 4801 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 | I | — |
| 2 | 0.8 | BN/WH | 4901 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 | I | — |

# Q17A Fuel Injector 1 (L82/L84/L87/LV3)



2792100

## Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

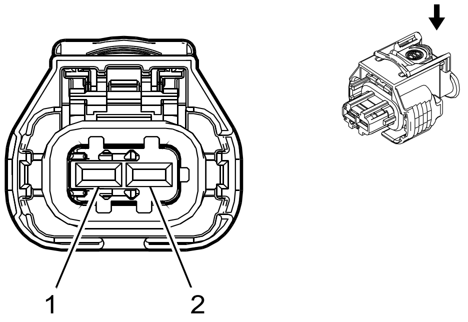
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17A Fuel Injector 1 (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN/WH | 4901 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 | I | — |
| 2 | 0.75 | BN | 4801 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 | I | — |

# Q17A Fuel Injector 1 (LM2)



2845578

## Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

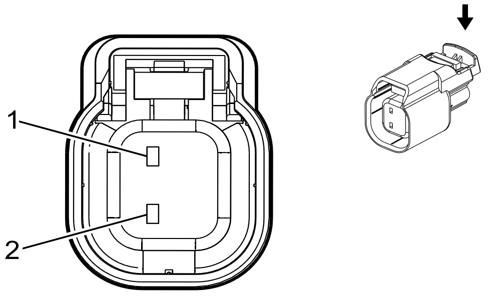
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17A Fuel Injector 1 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | BN/WH | 4901 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 | I | — |
| 2 | 1.5 | BN | 4801 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 | I | — |

# Q17B Fuel Injector 2 (L3B)



2792100

## Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

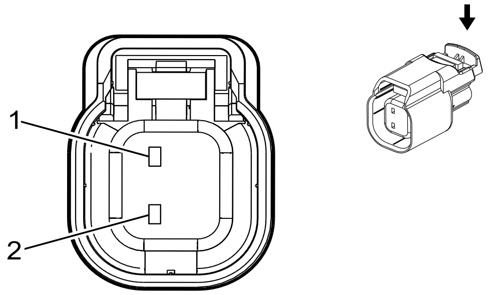
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17B Fuel Injector 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | BU | 4802 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 | I | — |
| 2 | 0.8 | BU/GY | 4902 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2 | I | — |

## Q17B Fuel Injector 2 (L82/L84/L87/LV3)



2792100

### Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

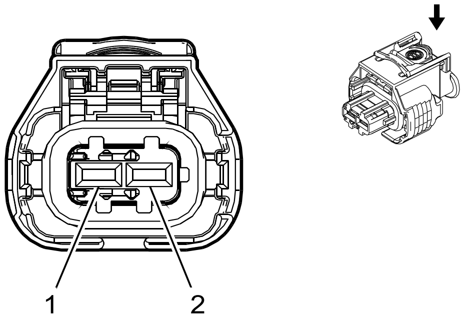
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q17B Fuel Injector 2 (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BU/GY | 4902 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2 | I | — |
| 2 | — | BU | 4802 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 | I | — |

# Q17B Fuel Injector 2 (LM2)



2845578

## Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

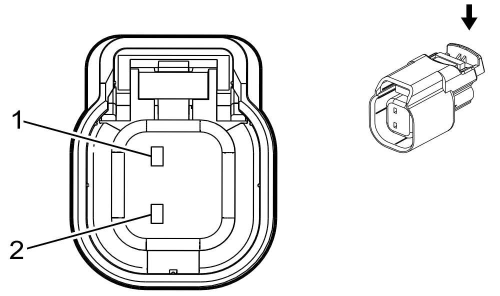
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17B Fuel Injector 2 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | BU/GY | 4902 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2 | I | — |
| 2 | 1.5 | BU | 4802 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 | I | — |

# Q17C Fuel Injector 3 (L3B)



2792100

## Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

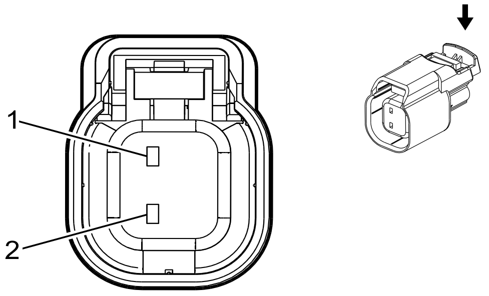
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17C Fuel Injector 3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | GN | 4803 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 3 | I | — |
| 2 | 0.8 | GN/GY | 4903 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3 | I | — |

# Q17C Fuel Injector 3 (L82/L84/L87/LV3)



2792100

## Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

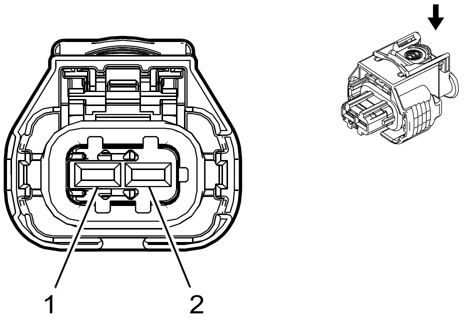
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17C Fuel Injector 3 (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GN/GY | 4903 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3 | I | — |
| 2 | 0.75 | GN | 4803 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 3 | I | — |

# Q17C Fuel Injector 3 (LM2)



2845578

## Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

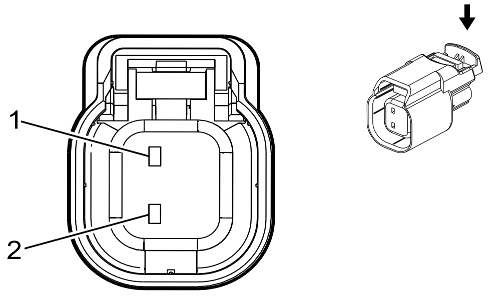
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17C Fuel Injector 3 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN/GY | 4903 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3 | I | — |
| 2 | 1.5 | GN | 4803 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 3 | I | — |

# Q17D Fuel Injector 4 (L3B)



2792100

## Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 34062-4008
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

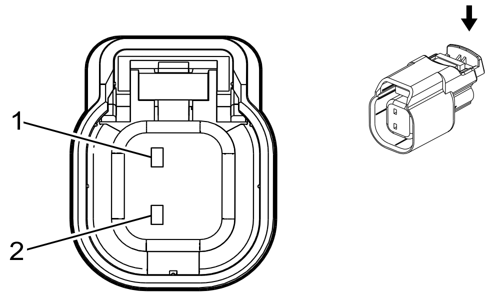
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17D Fuel Injector 4 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.8 | GY/BU | 4804 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 4 | I | — |
| 2 | 0.8 | BU/WH | 4904 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4 | I | — |

# Q17D Fuel Injector 4 (L82/L84/L87/LV3)



2792100

## Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

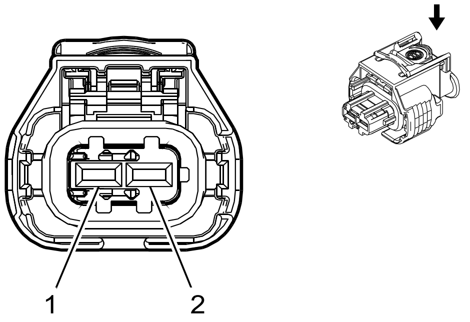
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17D Fuel Injector 4 (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BU/WH | 4904 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4 | I | — |
| 2 | — | GY/BU | 4804 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 4 | I | — |

# Q17D Fuel Injector 4 (LM2)



2845578

## Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

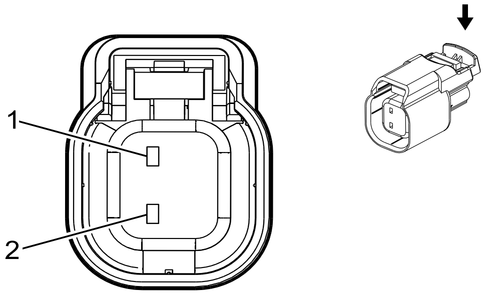
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17D Fuel Injector 4 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | BU/WH | 4904 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4 | I | — |
| 2 | 1.5 | GY/BU | 4804 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 4 | I | — |

# Q17E Fuel Injector 5 (L82/L84/L87/LV3)



2792100

## Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

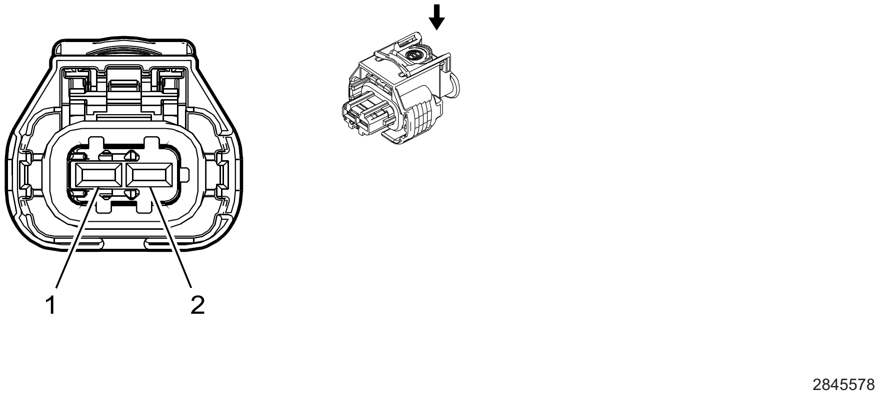
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17E Fuel Injector 5 (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GN/WH | 4905 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5 | I | — |
| 2 | — | WH/GN | 4805 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 5 | I | — |

## Q17E Fuel Injector 5 (LM2)



### Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

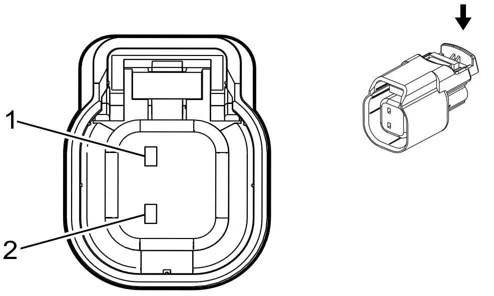
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q17E Fuel Injector 5 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | GN/WH | 4905 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5 | I | — |
| 2 | 1.5 | WH/GN | 4805 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 5 | I | — |

# Q17F Fuel Injector 6 (L82/L84/L87/LV3)



2792100

## Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

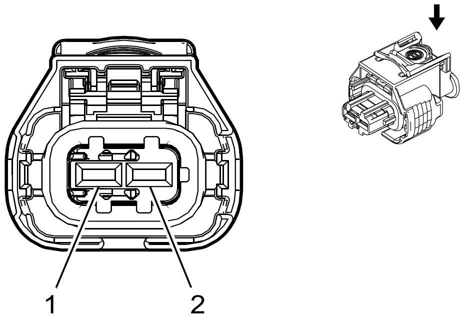
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17F Fuel Injector 6 (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | VT/GY | 4906 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6 | I | — |
| 2 | — | VT/GN | 4806 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 6 | I | — |

# Q17F Fuel Injector 6 (LM2)



2845578

## Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13343445
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 2.8 Series, Sealed (BK)

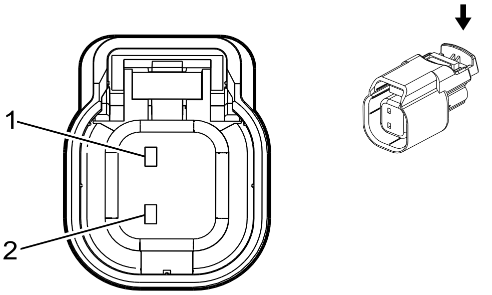
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17F Fuel Injector 6 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1.5 | VT/GY | 4906 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6 | I | — |
| 2 | 1.5 | VT/GN | 4806 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 6 | I | — |

# Q17G Fuel Injector 7 (L82/L84/L87)



2792100

## Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

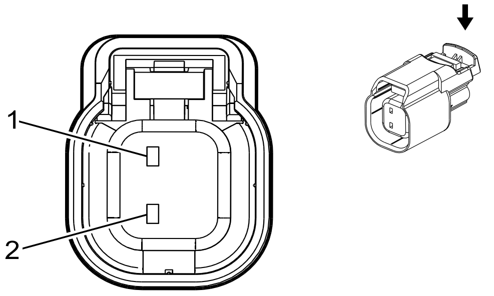
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q17G Fuel Injector 7 (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | WH/YE | 4907 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 7 | I | — |
| 2 | — | YE/GY | 4807 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 7 | I | — |

## Q17H Fuel Injector 8 (L82/L84/L87)



2792100

### Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13581410
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.5 Series, Sealed (BK)

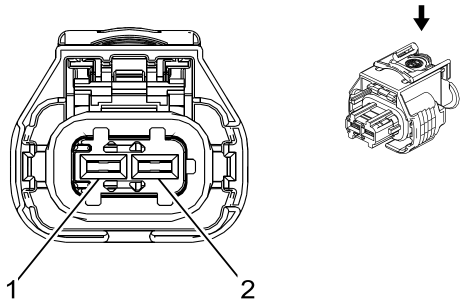
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q17H Fuel Injector 8 (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GY/WH | 4908 | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 8 | I | — |
| 2 | — | GY | 4808 | Direct Fuel Injector (DFI) High Voltage Control Cylinder 8 | I | — |

## Q18A Fuel Pressure Regulator 1 (LM2)



2577394

### Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

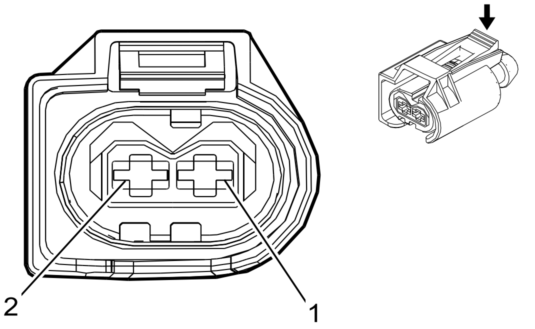
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q18A Fuel Pressure Regulator 1 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | YE/VT | 7245 | High Pressure Fuel Pump Low Enable | I | — |
| 2 | 0.75 | GY/BN | 7244 | High Pressure Fuel Pump High Side Supply | I | — |

## Q18B Fuel Pressure Regulator 2 (LM2)



5095463

### Connector Part Information

Harness Type: Engine
OEM Connector: 33163309
Service Connector: 84616656
Description: 2-Way F 2.8 Series, Sealed (BK)

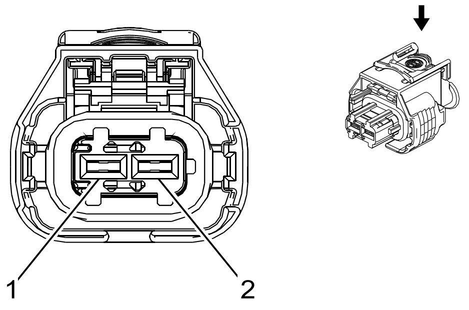
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q18B Fuel Pressure Regulator 2 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/YE | 2834 | Fuel Rail Pressure Solenoid Low Reference | I | — |
| 2 | 0.5 | BU/WH | 2530 | Fuel Rail Pressure Solenoid Control | I | — |

## Q18C Fuel Pressure Regulator 3 (LM2)



2577394

### Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

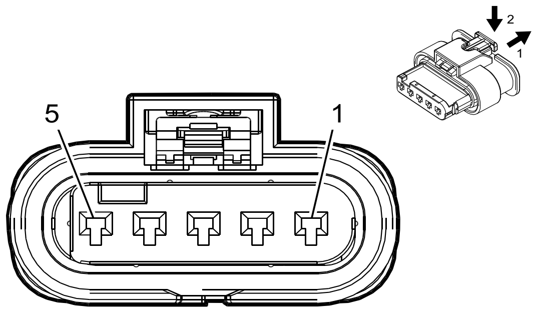
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q18C Fuel Pressure Regulator 3 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 1 | YE/VT | 2420 | Fuel High Pressure Pump Low Enable | I | — |
| 2 | 1 | GY/BN | 2419 | Fuel High Pressure Pump High Side Supply | I | — |

# Q22 Intake Manifold Tuning Solenoid Valve (LM2)



3338689

## Connector Part Information

Harness Type: Engine
OEM Connector: 13943325
Service Connector: 19119351
Description: 5-Way F 1.2 MCON-LL Series, Sealed (BK)

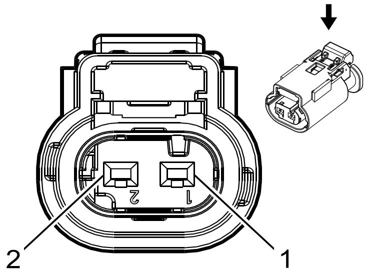
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q22 Intake Manifold Tuning Solenoid Valve (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |
| 2 | 0.5 | GN/GY | 7316 | Variable Swirl Valve PWM Control Signal | I | — |
| 3 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 4 | 0.75 | BK/BU | 1408 | Variable Swirl Valve Close Control | I | — |
| 5 | 0.75 | BK/GN | 1389 | Variable Swirl Valve Open Control | I | — |

# Q37LF Shock Absorber Actuator - Left Front (Z45)



2717066

## Connector Part Information

Harness Type: Electronic Suspension Strut Extension
OEM Connector: 10010337
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

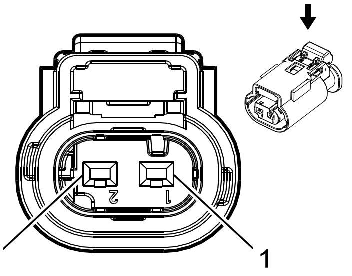
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q37LF Shock Absorber Actuator - Left Front (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU/WH | 1107 | Left Front Damping Servo Control | I | — |
| 2 | 0.75 | GY | 1113 | Left Front Damping Servo Control | I | — |

# Q37LR Shock Absorber Actuator - Left Rear (Z45)



2717066

## Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

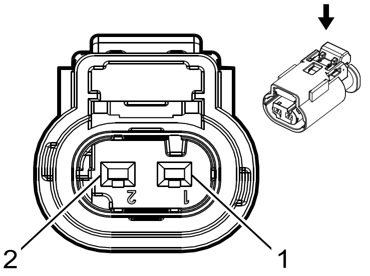
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q37LR Shock Absorber Actuator - Left Rear (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU/WH | 1114 | Left Rear Damping Servo Control | I | Z45 |
| 2 | 0.75 | GN | 1115 | Left Rear Damping Servo Control | I | Z45 |

# Q37RF Shock Absorber Actuator - Right Front (Z45)



2717066

## Connector Part Information

Harness Type: Electronic Suspension Strut Extension
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

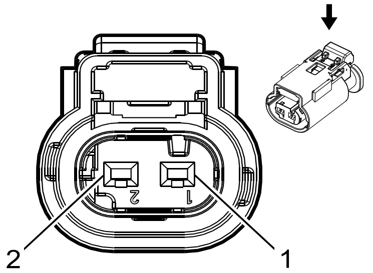
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q37RF Shock Absorber Actuator - Right Front (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU/WH | 1116 | Right Front Damping Servo Control | I | — |
| 2 | 0.75 | GY | 1117 | Right Front Damping Servo Control | I | — |

# Q37RR Shock Absorber Actuator - Right Rear (Z45)



2717066

## Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

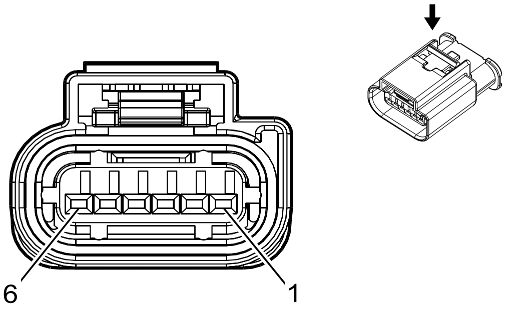
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q37RR Shock Absorber Actuator - Right Rear (Z45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU/WH | 1118 | Right Rear Damping Servo Control | I | Z45 |
| 2 | 0.75 | BU/WH | 1119 | Right Rear Damping Servo Control | I | Z45 |

## Q38 Throttle Body



3747579

### Connector Part Information

Harness Type: Engine
OEM Connector: 33220833
Service Connector: 19352911
Description: 6-Way F 1.2 MCON Series, Sealed (BK)

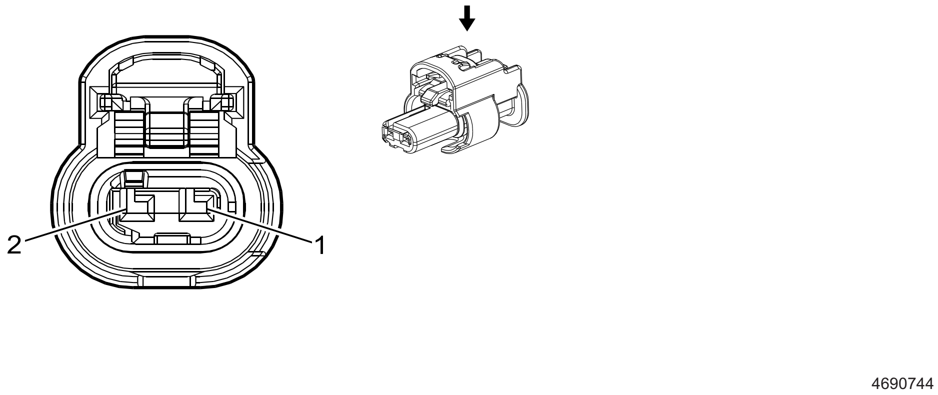
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q38 Throttle Body

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5<br>0.75 | YE<br>YE | 581<br>581 | Throttle Actuator Control Open<br>Throttle Actuator Control Open | I<br>I | L3B/L82/L84/L87/LV3<br>LM2 |
| 2 | 0.5<br>0.75 | BN/WH<br>BN/WH | 582<br>582 | Throttle Actuator Control Close<br>Throttle Actuator Control Close | I<br>I | L3B/L82/L84/L87/LV3<br>LM2 |
| 3 | 0.5<br>0.75 | BU/WH<br>BU/WH | 3630<br>3630 | Throttle Position Sensor (SENT1) Signal<br>Throttle Position Sensor (SENT1) Signal | I<br>I | L3B/L82/L84/L87/LV3<br>LM2 |
| 4 | 0.5<br>0.5 | BK/BN<br>BK/GN | 2752<br>580 | Throttle Position Sensor Low Reference<br>Engine Control Sensors Low Reference (2) | I<br>I | L3B/L82/L84/L87/LV3<br>LM2 |
| 5 | 0.5<br>0.5 | BN/RD<br>WH/RD | 2701<br>480 | Throttle Position Sensor 5V Reference<br>Engine Control Sensors 5 Volt Reference (2) | I<br>I | L3B/L82/L84/L87/LV3<br>LM2 |
| 6 | — | — | — | Not Occupied | — | — |

# Q40 Turbocharger Bypass Solenoid Valve (L3B)



## Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

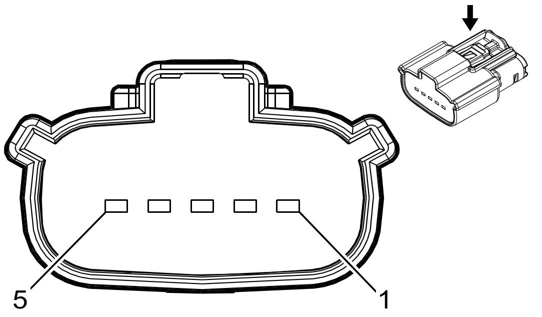
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q40 Turbocharger Bypass Solenoid Valve (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 2 | 0.75 | GN | 3060 | Turbo Bypass Solenoid Control Bank 1 | I | — |

## Q43 Valve Lifter Oil Manifold Assembly (LV3)



3240108

### Connector Part Information

Harness Type: Engine
OEM Connector: 13843947
Service Connector: 19301721
Description: 5-Way F 150 MX Series, Sealed (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q43 Valve Lifter Oil Manifold Assembly (LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 5491 | Cylinder Shutoff Solenoid Control 1 | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.5 | GN | 5492 | Cylinder Shutoff Solenoid Control 2 | I | — |

# Q44 Engine Oil Pressure Control Solenoid Valve (L3B)

—

## Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

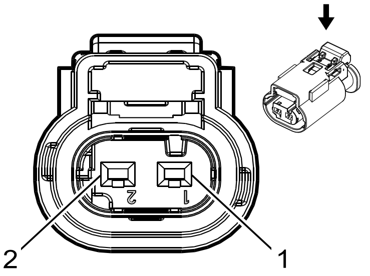
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q44 Engine Oil Pressure Control Solenoid Valve (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/BN | 106 | Oil Pump Motor Control | I | — |
| 2 | 0.5 | BU | 179 | Oil Pump Command Signal | I | — |

# Q44 Engine Oil Pressure Control Solenoid Valve (L82/L84/L87/LV3)



## Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper
OEM Connector: 13503566
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

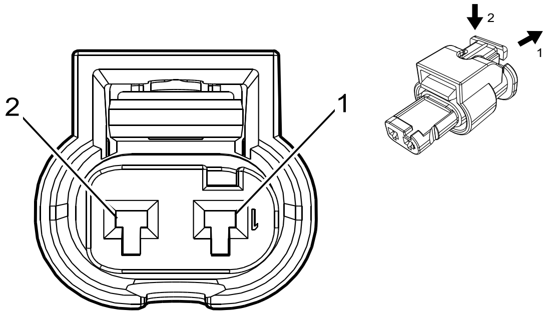
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q44 Engine Oil Pressure Control Solenoid Valve (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |
| 2 | 0.5 | BU | 179 | Oil Pump Command Signal | I | — |

# Q44 Engine Oil Pressure Control Solenoid Valve (LM2)



4284830

## Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper
OEM Connector: 13587570
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

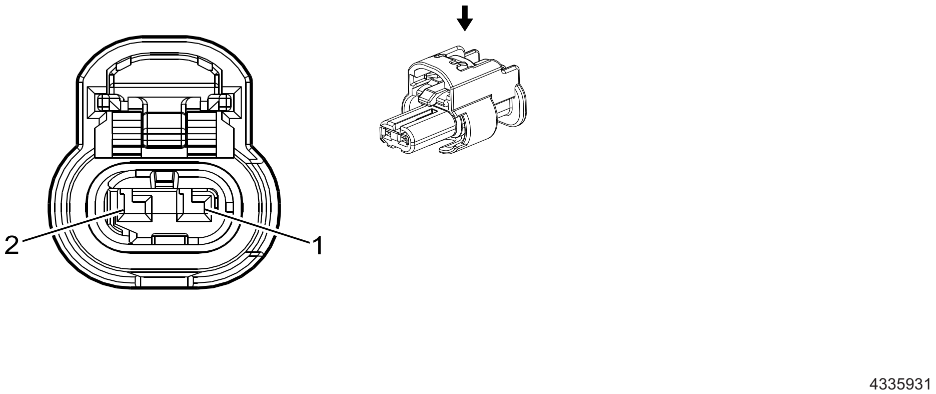
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q44 Engine Oil Pressure Control Solenoid Valve (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/BN | 106 | Oil Pump Motor Control | I | — |
| 2 | 0.5 | BU | 179 | Oil Pump Command Signal | I | — |

# Q46 A/C Compressor Solenoid Valve (L3B/LV3)



## Connector Part Information

Harness Type: Engine
OEM Connector: 33208371
Service Connector: 19353141
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

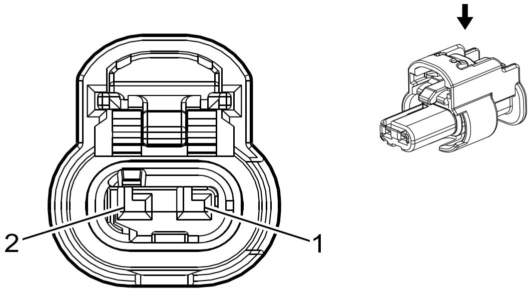
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q46 A/C Compressor Solenoid Valve (L3B/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/YE | 7574 | Electric Variable Displacement Control | I | — |
| 2 | 0.5 | BU/BN | 7573 | Electric Variable Displacement Supply | I | — |

# Q46 A/C Compressor Solenoid Valve (L82)



4690744

## Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

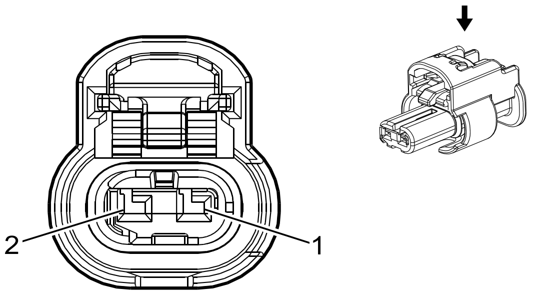
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q46 A/C Compressor Solenoid Valve (L82)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/YE | 7574 | Electric Variable Displacement Control | I | — |
| 2 | 0.5 | BU/BN | 7573 | Electric Variable Displacement Supply | I | — |

# Q46 A/C Compressor Solenoid Valve (LM2/L84/L87)



4335931

## Connector Part Information

Harness Type: Engine
OEM Connector: 33371691
Service Connector: 19366843
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

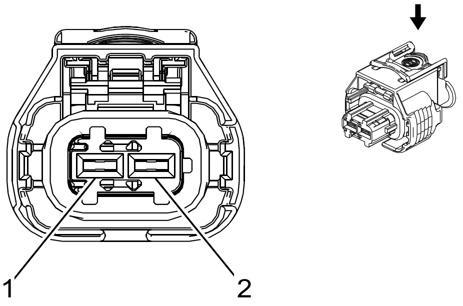
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q46 A/C Compressor Solenoid Valve (LM2/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU/YE | 7574 | Electric Variable Displacement Control | I | — |
| 2 | 0.5 | BU/BN | 7573 | Electric Variable Displacement Supply | I | — |

# Q61 Reductant Injector (LM2)



2577394

## Connector Part Information

Harness Type: Engine
OEM Connector: 13930085
Service Connector: 13384371
Description: 2-Way F 2.8 Series, Sealed (BK)

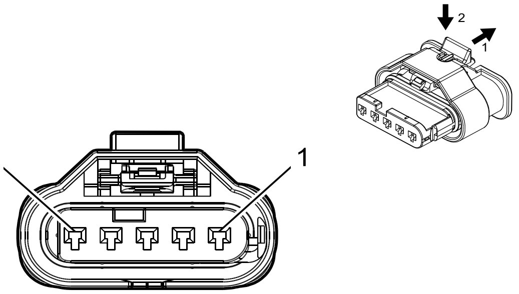
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q61 Reductant Injector (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BN/WH | 3100 | DEF Dosing Valve Low Control | I | — |
| 2 | 0.75 | BN | 3099 | DEF Dosing Valve High Control | I | — |

# Q74 Engine Coolant Bypass Valve (L3B)



4994456

## Connector Part Information

Harness Type: Engine
OEM Connector: 35110578
Service Connector: 19371191
Description: 5-Way F 1.2 MCON-LL Series, Sealed (NA)

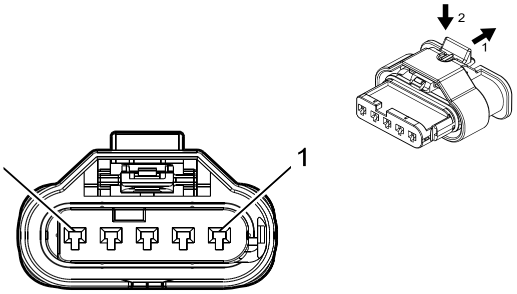
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q74 Engine Coolant Bypass Valve (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU | 2976 | Coolant Diverter Valve Actuator Control Low | I | — |
| 2 | 0.75 | BU/BN | 2977 | Coolant Diverter Valve Actuator Control High | I | — |
| 3 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 4 | 0.5 | BK/BU | 2978 | Coolant Diverter Valve Position Signal | I | — |
| 5 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |

# Q74 Engine Coolant Bypass Valve (LM2)



4994456

## Connector Part Information

Harness Type: Engine
OEM Connector: 35110578
Service Connector: 19371191
Description: 5-Way F 1.2 MCON-LL Series, Sealed (NA)

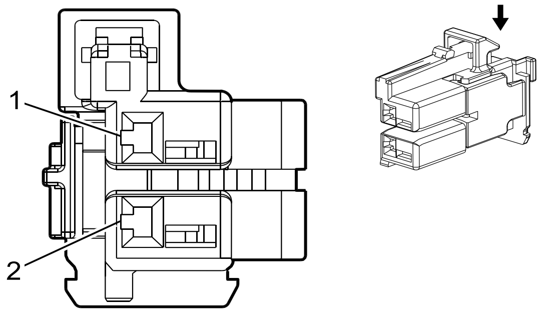
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q74 Engine Coolant Bypass Valve (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BU | 2976 | Coolant Diverter Valve Actuator Control Low | I | — |
| 2 | 0.75 | BU/BN | 2977 | Coolant Diverter Valve Actuator Control High | I | — |
| 3 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 4 | 0.5 | BU/GY | 2978 | Coolant Diverter Valve Position Signal | I | — |
| 5 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |

## Q77A Transmission Control Solenoid Valve 1 (MQB)



4672650

### Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

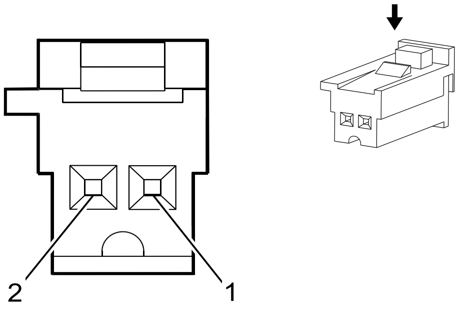
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q77A Transmission Control Solenoid Valve 1 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/ | 6388 | Transmission High Side Driver 2 Signal | I | — |
| 2 | 0.5 | BU/GN | 6404 | Clutch E Control | I | — |

# Q77A Transmission Control Solenoid Valve 1 (MQE)



4051391

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (VT)

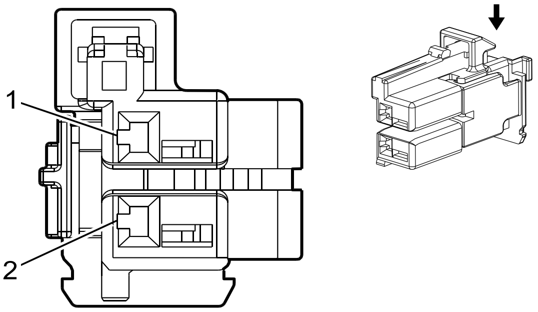
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77A Transmission Control Solenoid Valve 1 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6400 | Clutch A Control | I | — |
| 2 | 0.5 | GY/BN | 6388 | Transmission High Side Driver 2 Signal | I | — |

# Q77B Transmission Control Solenoid Valve 2 (MQB)



4672650

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

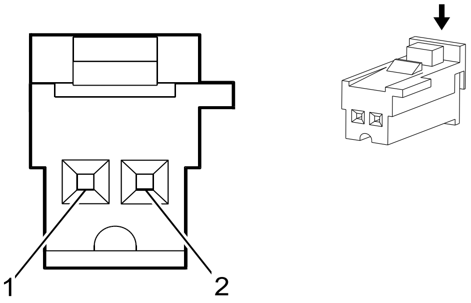
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77B Transmission Control Solenoid Valve 2 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/ | 6388 | Transmission High Side Driver 2 Signal | I | — |
| 2 | 0.5 | GN/BN | 6403 | Clutch D Control | I | — |

# Q77B Transmission Control Solenoid Valve 2 (MQE)



4008644

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (GY)

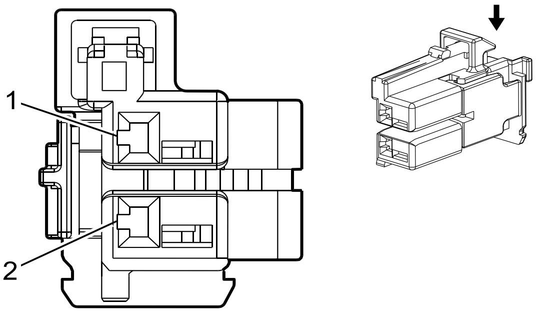
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77B Transmission Control Solenoid Valve 2 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 6401 | Clutch B Control | I | — |
| 2 | 0.5 | GY/BN | 6388 | Transmission High Side Driver 2 Signal | I | — |

# Q77C Transmission Control Solenoid Valve 3 (MQB)



4672650

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

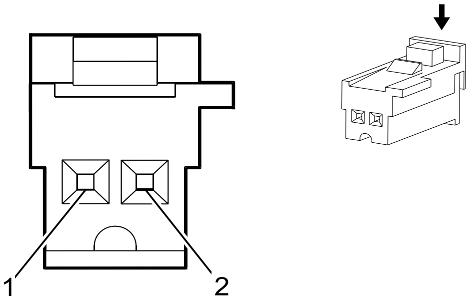
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77C Transmission Control Solenoid Valve 3 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/ | 6388 | Transmission High Side Driver 2 Signal | I | — |
| 2 | 0.5 | GY/ | 6402 | Clutch C Control | I | — |

## Q77C Transmission Control Solenoid Valve 3 (MQE)



4008644

### Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (GY)

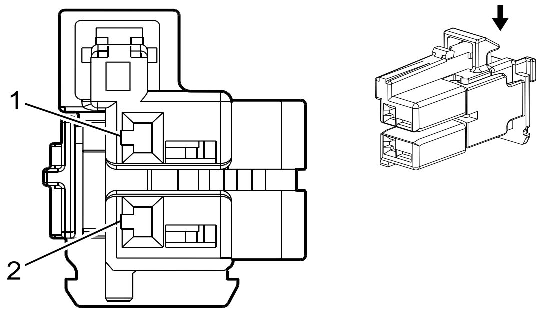
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q77C Transmission Control Solenoid Valve 3 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY | 6402 | Clutch C Control | I | — |
| 2 | 0.5 | GY/BN | 6388 | Transmission High Side Driver 2 Signal | I | — |

# Q77D Transmission Control Solenoid Valve 4 (MQB)



4672650

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

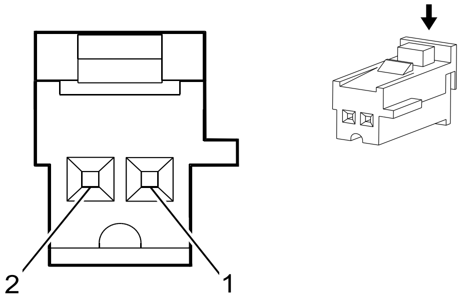
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77D Transmission Control Solenoid Valve 4 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/ | 6388 | Transmission High Side Driver 2 Signal | I | — |
| 2 | 0.5 | BN/WH | 4509 | Transmission Clutch F Control | I | — |

# Q77D Transmission Control Solenoid Valve 4 (MQE)



4008636

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13947283
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (NA)

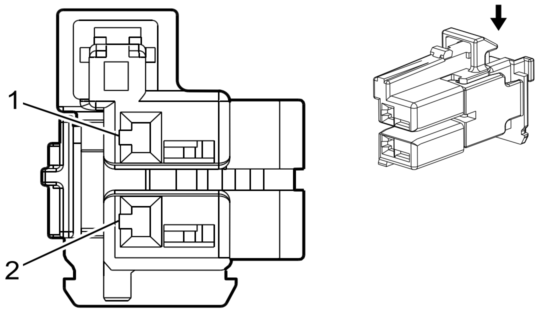
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77D Transmission Control Solenoid Valve 4 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH | 4508 | Transmission Clutch G Control | I | — |
| 2 | 0.5 | GN/GY | 6387 | Transmission High Side Driver 1 Signal Driver | I | — |

# Q77E Transmission Control Solenoid Valve 5 (MQB)



4672650

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

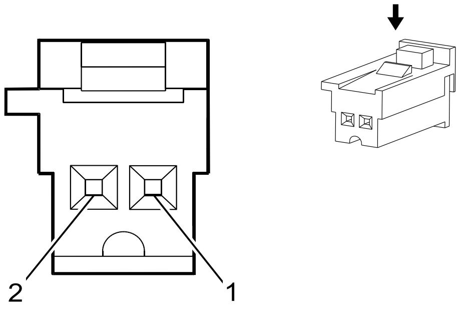
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77E Transmission Control Solenoid Valve 5 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/ | 6388 | Transmission High Side Driver 2 Signal | I | — |
| 2 | 0.5 | YE/VT | 4507 | Transmission Clutch H Control | I | — |

# Q77E Transmission Control Solenoid Valve 5 (MQE)



4051391

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (VT)

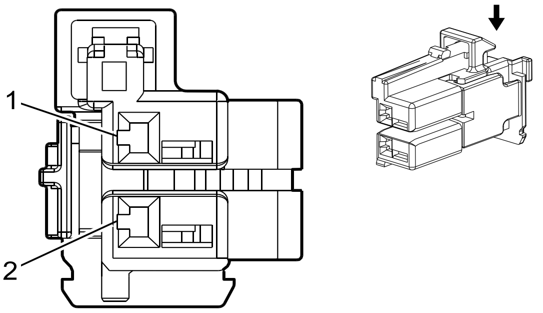
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77E Transmission Control Solenoid Valve 5 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/BU | 4507 | Transmission Clutch H Control | I | — |
| 2 | 0.5 | GN/GY | 6387 | Transmission High Side Driver 1 Signal Driver | I | — |

# Q77F Transmission Control Solenoid Valve 6 (MQB)



4672650

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

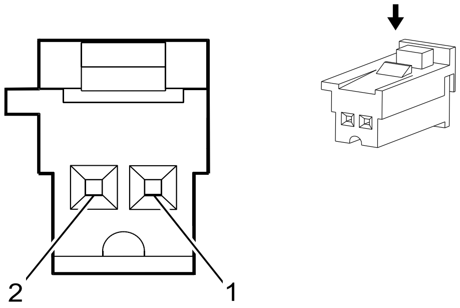
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q77F Transmission Control Solenoid Valve 6 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/ | 6388 | Transmission High Side Driver 2 Signal | I | — |
| 2 | 0.5 | BU/GY | 4508 | Transmission Clutch G Control | I | — |

# Q77F Transmission Control Solenoid Valve 6 (MQE)



4051391

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13956948
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (VT)

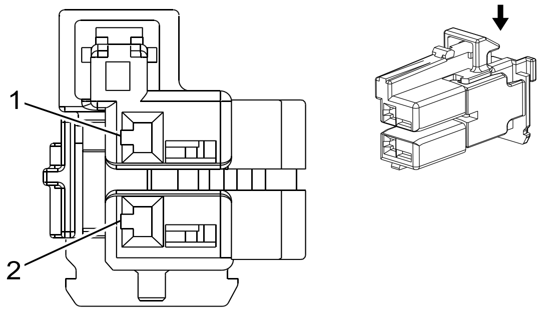
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77F Transmission Control Solenoid Valve 6 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/GN | 6403 | Clutch D Control | I | — |
| 2 | 0.5 | GY/BN | 6388 | Transmission High Side Driver 2 Signal | I | — |

# Q77G Transmission Control Solenoid Valve 7 (MQB)



4364736

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BU)

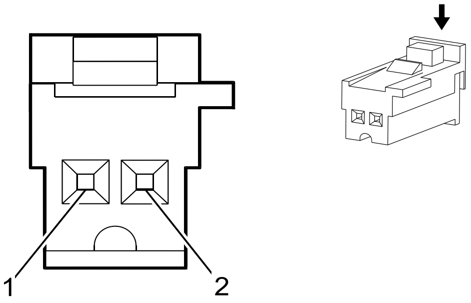
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77G Transmission Control Solenoid Valve 7 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Signal Driver | I | — |
| 2 | 0.5 | GN/OG | 1530 | Transmission Mainline Pressure Solenoid Control | I | — |

# Q77G Transmission Control Solenoid Valve 7 (MQE)



4008644

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 13941672
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 0.64 MTS Series (GY)

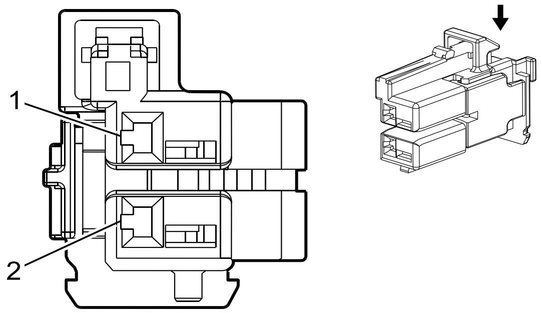
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77G Transmission Control Solenoid Valve 7 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/BN | 6404 | Clutch E Control | I | — |
| 2 | 0.5 | GY/BN | 6388 | Transmission High Side Driver 2 Signal | I | — |

# Q77H Transmission Control Solenoid Valve 8 (MQB)



4672683

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 2289523-3
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (GN)

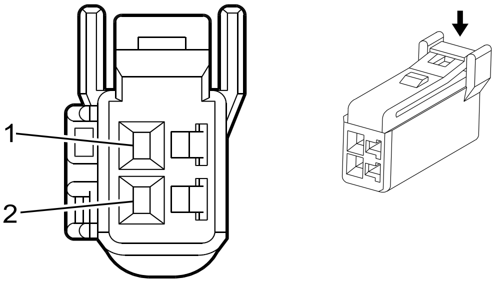
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77H Transmission Control Solenoid Valve 8 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Signal Driver | I | — |
| 2 | 0.5 | GY/BN | 422 | Torque Converter Clutch Solenoid Control | I | — |

# Q77H Transmission Control Solenoid Valve 8 (MQE)



4051682

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 7287-0122
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 040 III Series (NA)

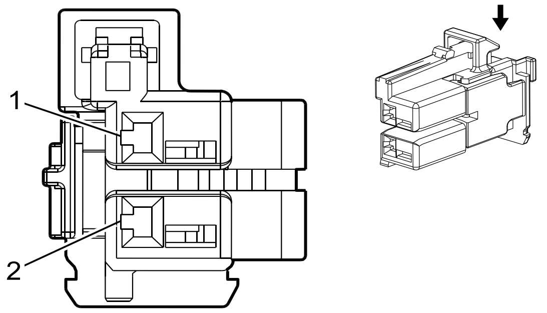
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77H Transmission Control Solenoid Valve 8 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/WH | 6380 | TCC On/Off Solenoid A Control | I | — |
| 2 | 0.5 | GN/GY | 6387 | Transmission High Side Driver 1 Signal Driver | I | — |

# Q77J Transmission Control Solenoid Valve 9 (MQB)



4672650

## Connector Part Information

Harness Type: Transmission Control Extension
OEM Connector: 2289523-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series (BN)

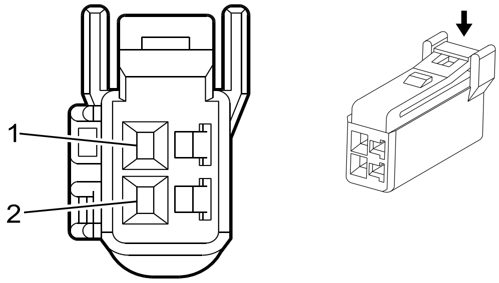
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q77J Transmission Control Solenoid Valve 9 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | WH/ | 6388 | Transmission High Side Driver 2 Signal | I | — |
| 2 | — | VT/ | 7819 | Default Disable Solenoid Control | I | — |

## Q77J Transmission Control Solenoid Valve 9 (MQE)



4051682

### Connector Part Information

Harness Type: Transmission Control
OEM Connector: 7287-0122
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 040 III Series (NA)

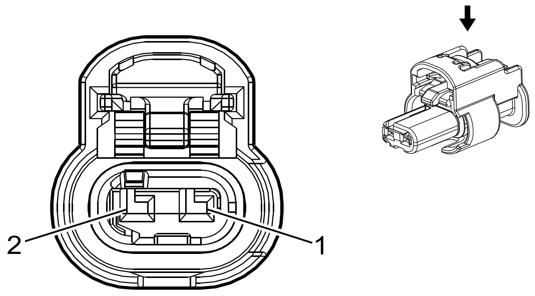
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q77J Transmission Control Solenoid Valve 9 (MQE)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/BN | 6210 | TCC On/Off Solenoid B Control | I | — |
| 2 | 0.5 | GY/BN | 6388 | Transmission High Side Driver 2 Signal | I | — |

# Q80L Engine Mount Solenoid Valve - Left (L3B)



4690744

## Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

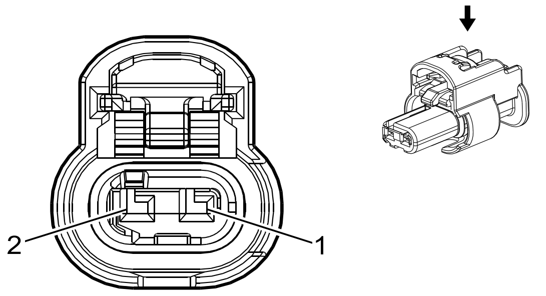
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q80L Engine Mount Solenoid Valve - Left (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD/GN | 40 | Battery Positive Voltage | I | — |
| 2 | 0.5 | BN/BU | 4065 | Powertrain Mount Solenoid Control 1 | I | — |

# Q80L Engine Mount Solenoid Valve - Left (LM2)



4690744

## Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

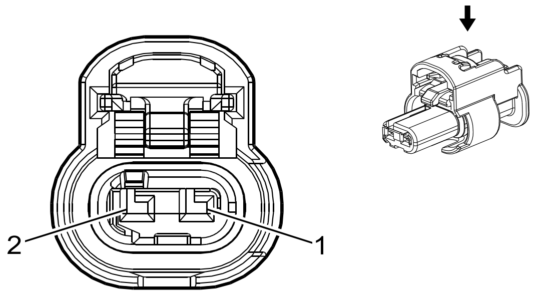
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q80L Engine Mount Solenoid Valve - Left (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD/GN | 40 | Battery Positive Voltage | I | — |
| 2 | 0.5 | BN/BU | 4065 | Powertrain Mount Solenoid Control 1 | I | — |

# Q80R Engine Mount Solenoid Valve - Right (L3B)



## Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

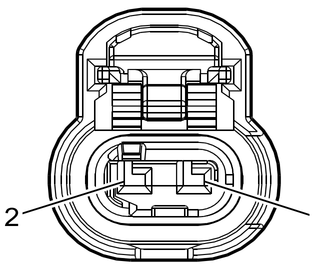
### Terminal Part Information

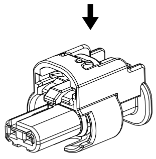
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q80R Engine Mount Solenoid Valve - Right (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD/GN | 40 | Battery Positive Voltage | I | — |
| 2 | 0.5 | BN/YE | 4066 | Powertrain Mount Solenoid Control 2 | I | — |

## Q80R Engine Mount Solenoid Valve - Right (LM2)





4690744

### Connector Part Information

Harness Type: Engine
OEM Connector: 33375932
Service Connector: 19366871
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q80R Engine Mount Solenoid Valve - Right (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | RD/GN | 40 | Battery Positive Voltage | I | — |
| 2 | 0.5 | BN/YE | 4066 | Powertrain Mount Solenoid Control 2 | I | — |

## Q83AA Valve Lifter Oil Solenoid Valve - Cylinder 1 (L82/L84/L87)

—

### Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q83AA Valve Lifter Oil Solenoid Valve - Cylinder 1 (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | WH/BU | 2491 | Cylinder Shutoff Solenoid Enable (1) | I | — |
| 2 | — | BU | 5491 | Cylinder Shutoff Solenoid Control 1 | I | — |

# Q83AB Valve Lifter Oil Solenoid Valve - Cylinder 2 (L84/L87)

—

## Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q83AB Valve Lifter Oil Solenoid Valve - Cylinder 2 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | WH/GN | 2492 | Cylinder Shutoff Solenoid Enable (2) | I | — |
| 2 | — | GN | 5492 | Cylinder Shutoff Solenoid Control 2 | I | — |

# Q83AC Valve Lifter Oil Solenoid Valve - Cylinder 3 (L84/L87)

—

## Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q83AC Valve Lifter Oil Solenoid Valve - Cylinder 3 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | YE/GY | 2493 | Cylinder Shutoff Solenoid Enable (3) | I | — |
| 2 | — | GY | 5493 | Cylinder Shutoff Solenoid Control 3 | I | — |

# Q83AD Valve Lifter Oil Solenoid Valve - Cylinder 4 (L82/L84/L87)

—

## Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q83AD Valve Lifter Oil Solenoid Valve - Cylinder 4 (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | YE/GN | 2494 | Cylinder Shutoff Solenoid Enable (4) | I | — |
| 2 | — | YE/BU | 5494 | Cylinder Shutoff Solenoid Control 4 | I | — |

# Q83AE Valve Lifter Oil Solenoid Valve - Cylinder 5 (L84/L87)

—

## Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q83AE Valve Lifter Oil Solenoid Valve - Cylinder 5 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | WH/VT | 2495 | Cylinder Shutoff Solenoid Enable (5) | I | — |
| 2 | — | VT | 5495 | Cylinder Shutoff Solenoid Control 5 | I | — |

# Q83AF Valve Lifter Oil Solenoid Valve - Cylinder 6 (L82/L84/L87)

—

## Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q83AF Valve Lifter Oil Solenoid Valve - Cylinder 6 (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | YE/BN | 2496 | Cylinder Shutoff Solenoid Enable (6) | I | — |
| 2 | — | BN | 5496 | Cylinder Shutoff Solenoid Control 6 | I | — |

# Q83AG Valve Lifter Oil Solenoid Valve - Cylinder 7 (L82/L84/L87)

—

## Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q83AG Valve Lifter Oil Solenoid Valve - Cylinder 7 (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GN/GY | 2497 | Cylinder Shutoff Solenoid Enable (7) | I | — |
| 2 | — | WH | 5497 | Cylinder Shutoff Solenoid Control 7 | I | — |

# Q83AH Valve Lifter Oil Solenoid Valve - Cylinder 8 (L84/L87)

—

## Connector Part Information

Harness Type: Valve Lifter Oil Solenoid Valve Jumper
OEM Connector: 13514238
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

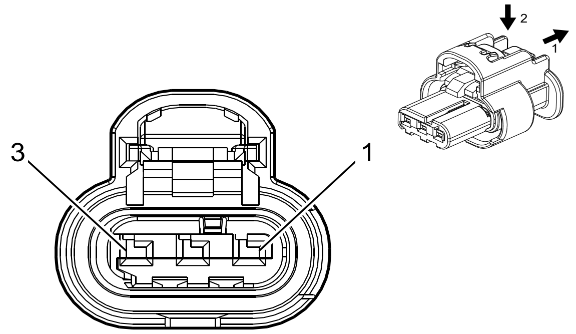
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### Q83AH Valve Lifter Oil Solenoid Valve - Cylinder 8 (L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | WH/YE | 2498 | Cylinder Shutoff Solenoid Enable (8) | I | — |
| 2 | — | YE | 5498 | Cylinder Shutoff Solenoid Control 8 | I | — |

# Q97 Engine Coolant Flow Control Valve (L3B)



4778903

## Connector Part Information

Harness Type: Engine
OEM Connector: 33277161
Service Connector: 19371206
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

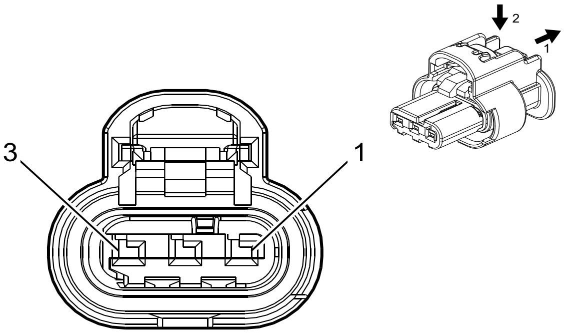
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q97 Engine Coolant Flow Control Valve (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/BN | 2732 | Local Interconnect Network Bus 32 | I | L3B |
| 2 | 0.5 | BK | 4450 | Ground | I | L3B |
| 3 | 0.5 | VT/BU | 5294 | Powertrain Main Relay Fused Supply 5 | I | LM2 |

# Q97B Engine Coolant Flow Control Valve - Block (LM2)



4778903

## Connector Part Information

Harness Type: Engine
OEM Connector: 33358808
Service Connector: 19369810
Description: 3-Way F 1.2 MCON-CB Series, Sealed (BK)

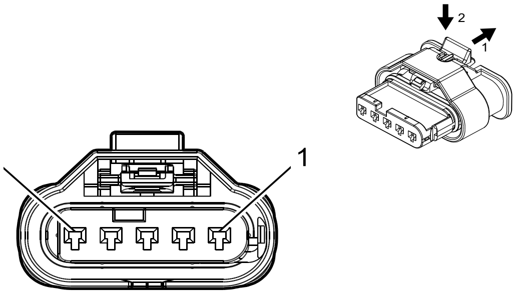
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q97B Engine Coolant Flow Control Valve - Block (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/BN | 2732 | Local Interconnect Network Bus 32 | I | — |
| 2 | 0.75 | BK | 4450 | Ground | I | — |
| 3 | 0.5 | VT/BU | 5293 | Powertrain Main Relay Fused Supply 4 | I | — |

# Q97M Engine Coolant Flow Control Valve - Main (LM2)



4994456

## Connector Part Information

Harness Type: Engine
OEM Connector: 35110578
Service Connector: 19371191
Description: 5-Way F 1.2 MCON-LL Series, Sealed (NA)

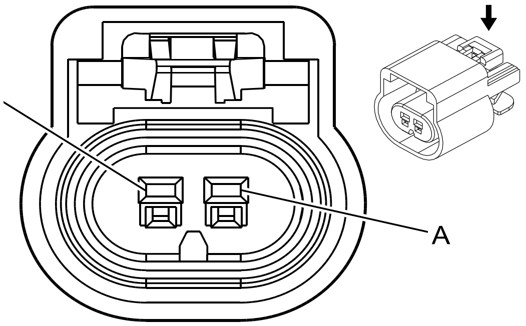
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## Q97M Engine Coolant Flow Control Valve - Main (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GY/BN | 2972 | Coolant Flow Control Actuator Control High | I | — |
| 2 | 0.75 | GY/BU | 2971 | Coolant Flow Control Actuator Control Low | I | — |
| 3 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 4 | 0.5 | GY | 2973 | Coolant Flow Control Valve Position Signal | I | — |
| 5 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | I | — |

# R6A Terminating Resistor - High Speed Bus (IOS/IOT)



523630

## Connector Part Information

Harness Type: Chassis
OEM Connector: 13510085
Service Connector: 13580114
Description: 2-Way F 150 GT Series, Sealed (BK)

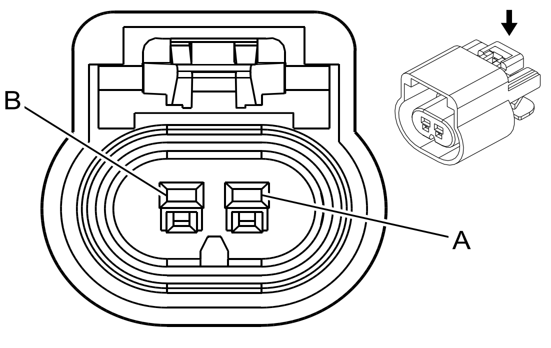
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## R6A Terminating Resistor - High Speed Bus (IOS/IOT)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 0.5 | BU | 2500 | High Speed GMLAN Serial Data (+) 1 | I | — |
| B | 0.5 | WH | 2501 | High Speed GMLAN Serial Data (-) 1 | I | — |

## R6E Terminating Resistor - High Speed Extension Bus 1 (UEU/UHX)



523630

### Connector Part Information

Harness Type: Headliner
OEM Connector: 13510085
Service Connector: 13580114
Description: 2-Way F 150 GT Series, Sealed (BK)

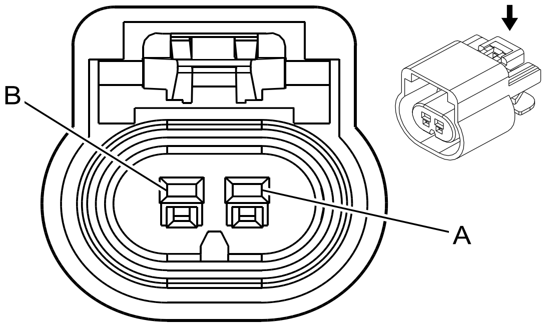
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### R6E Terminating Resistor - High Speed Extension Bus 1 (UEU/UHX)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 0.35 | BU/GY | 3935 | High Speed GMLAN Serial Data (+) 8 | I | — |
| B | 0.35 | WH/GY | 3936 | High Speed GMLAN Serial Data (-) 8 | I | — |

# R6F Terminating Resistor - High Speed Extension Bus 2 (IOS/IOT)



523630

## Connector Part Information

Harness Type: Chassis
OEM Connector: 13510085
Service Connector: 13580114
Description: 2-Way F 150 GT Series, Sealed (BK)

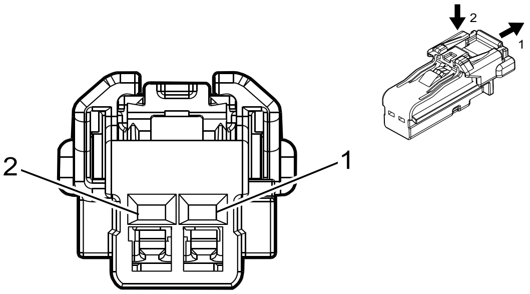
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## R6F Terminating Resistor - High Speed Extension Bus 2 (IOS/IOT)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 0.5 | BU/GN | 1304 | High Speed GMLAN Serial Data (+)9 | I | — |
| B | 0.5 | WH/GN | 1305 | High Speed GMLAN Serial Data (-)9 | I | — |

## S2 Transmission Manual Shift Switch



4115691

### Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

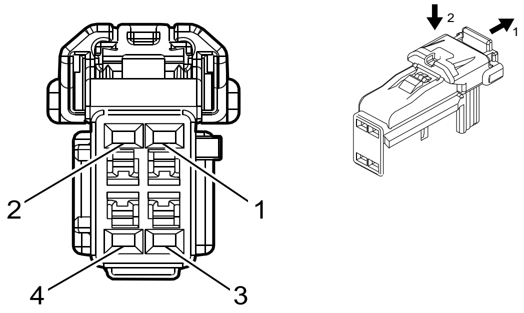
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### S2 Transmission Manual Shift Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/YE | 5526 | Tap Up/Tap Down Switch Signal | I | — |
| 2 | 0.5 | BK/WH | 1851 | Signal Ground | I | — |

# S3 Transmission Shift Lever



4872683

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35029308
Service Connector: 19369633
Description: 4-Way F 1.2 Series (BK)

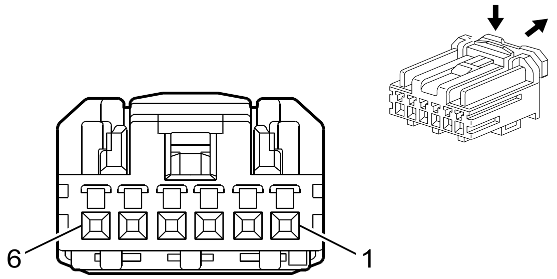
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S3 Transmission Shift Lever

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE/WH | 816 | Brake Transmission Shift Interlock Solenoid Control | I | — |
| 2 | 0.35 | BK | 1850 | Ground | I | — |
| 3 | 0.35 | GN/WH | 1932 | Shift Select Switch Park Signal | I | — |
| 4 | 0.35 | BK | 1850 | Ground | I | — |

# S13D Door Lock Switch - Driver



4650256

## Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 33315784
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 HCM Series (BK)

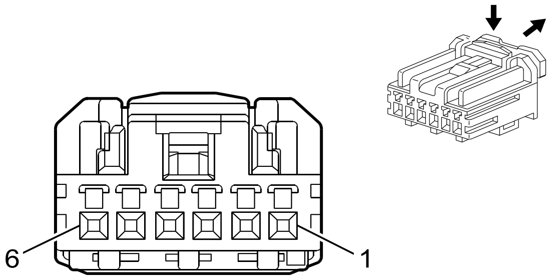
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S13D Door Lock Switch - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35<br>0.5 | YE<br>YE | 6817<br>6817 | LED Backlight Dimming Control<br>LED Backlight Dimming Control | I<br>I | A45<br>AU3 |
| 2 | 0.5 | BN/YE | 780 | Driver Door Lock Switch Lock Signal | I | — |
| 3 | 0.35 | BN/WH | 781 | Driver Door Lock Switch Unlock Signal | I | — |
| 4 | 0.35 | BK | 1150 | Ground | I | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |

# S13P Door Lock Switch - Passenger (AU3)



4650256

## Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 33315784
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 HCM Series (BK)

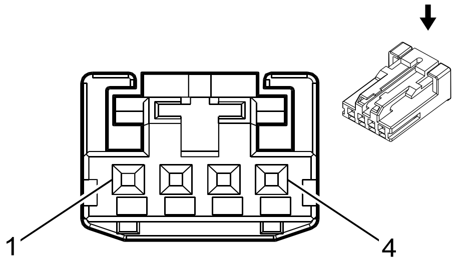
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S13P Door Lock Switch - Passenger (AU3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 2 | 0.35 | YE/VT | 244 | Passenger Door Lock Switch Lock Control | I | — |
| 3 | 0.35 | BN/VT | 245 | Passenger Door Lock Switch Unlock Control | I | — |
| 4 | 0.35 | BK | 1250 | Ground | I | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |

# S27 Head-Up Display Switch (UV6)



2717162

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13969166
Service Connector: 13587297
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

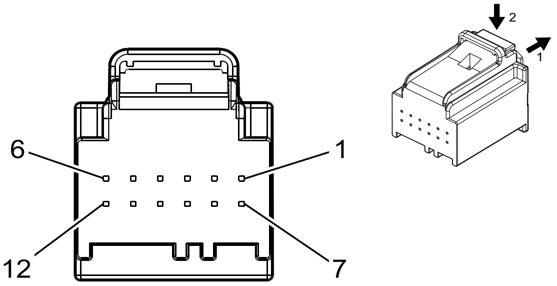
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S27 Head-Up Display Switch (UV6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 2 | 0.35 | BK | 1850 | Ground | I | — |
| 3 | 0.35 | BK/GN | 5699 | Head Up Display Switch Low Reference | I | — |
| 4 | 0.35 | YE/WH | 622 | Head Up Display Switch Signal | I | — |

# S30 Headlamp Switch



5095565

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35130710
Service Connector: 13525987
Description: 12-Way F 0.64 Series, Sealed (BK)

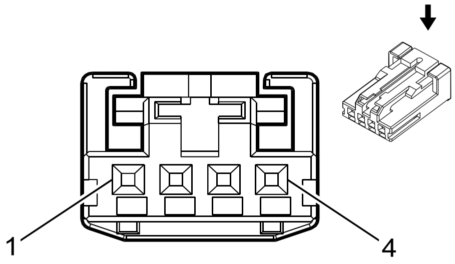
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575742 | J-35616-64B (LT BU) | J-38125-215A | SAIT-A03T-M064 | Yazaki 14 | P | P |
| II | 13575867 | J-35616-64B (LT BU) | J-38125-215A | SAIT-A03T-M064 | Yazaki 14 | P | P |

## S30 Headlamp Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH/VT | 103 | Headlamp Switch On Signal | II | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control | II | — |
| 3 | 0.35 | GN/BN | 306 | Headlamp Switch Headlamps Off Signal Control | II | — |
| 4 | 0.35 | GY | 158 | Cargo Lamp Switch Signal | II | — |
| 5 | 0.35 | GN/GY | 13 | Headlamp Switch Park Lamp Signal | II | — |
| 6 | 0.5 | WH/VT | 1430 | Exterior Courtesy Lamp Control | I | — |
| 7 | 0.35 | WH/GY | 2935 | Task Lamp Switch Signal | II | — |
| 8 | 0.35 | BK/WH | 1851 | Signal Ground | II | — |
| 9 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | WH/BN | 7555 | Lighting Control Switch Signal | II | — |
| 12 | 0.35 | YE | 7556 | Lighting Control Switch Reference | II | — |

# S32R Seat Heating Switch - Rear (D07+KA6)



2717162

## Connector Part Information

Harness Type: Floor Console
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

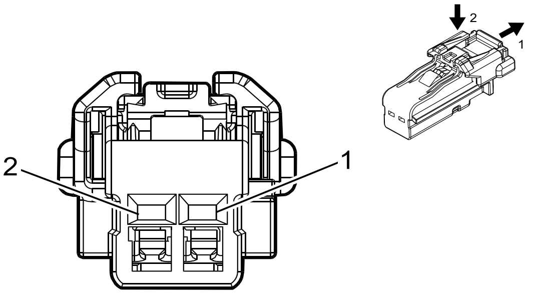
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S32R Seat Heating Switch - Rear (D07+KA6)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD/WH | 1340 | Battery Positive Voltage | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | GN/WH | 4115 | Local Interconnect Network Serial Data Bus 15 | I | — |
| 4 | 0.35 | BK | 1250 | Ground | I | — |

## S33 Horn Switch



4115691

### Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13588640
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Series (BK)

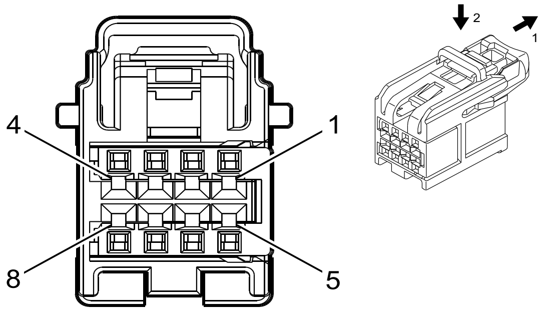
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### S33 Horn Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 1850 | Ground | I | — |
| 2 | — | RD | 3287 | Horn Switch Signal | I | — |

# S38 Ignition Mode Switch (BTM)



4232228

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15526973
Service Connector: 19353873
Description: 8-Way F 0.64 OCS Series (GY)

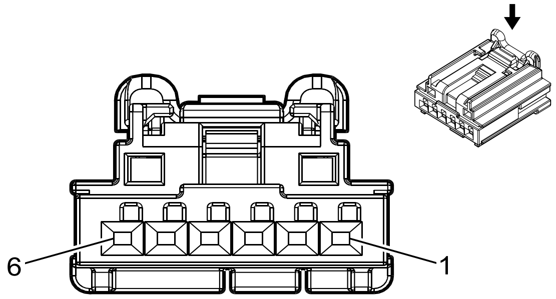
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S38 Ignition Mode Switch (BTM)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU/BK | 5719 | Ignition Mode Switch Start LED Signal | I | — |
| 2 | 0.35 | BN/BK | 5720 | Ignition Mode Switch Accessory LED Signal | I | — |
| 3 | 0.35 | BK/WH | 1851 | Signal Ground | I | — |
| 4 | 0.35 | BU/GN | 5723 | Ignition Mode Switch Mode Voltage | I | — |
| 5 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.35 | BK/GY | 3559 | Passive Start Switch 2 Low Reference | I | — |
| 8 | 0.35 | GN/BK | 3558 | Passive Start Switch Signal 2 | I | — |

# S39 Ignition Switch (-BTM)



3960313

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13920633
Service Connector: 19332786
Description: 6-Way F 0.64 Generation Y Series (BK)

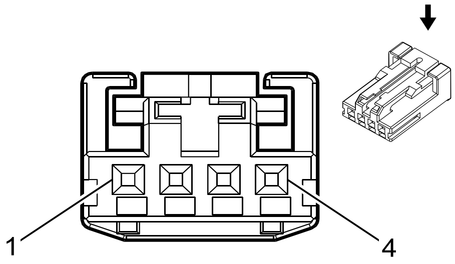
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S39 Ignition Switch (-BTM)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH/BK | 1073 | Ignition Key Resistor Signal | I | — |
| 2 | 0.5 | WH/VT | 1020 | Off/Run/Crank Ignition Voltage | I | — |
| 3 | 0.35 | VT/YE | 4 | Accessory Ignition Voltage | I | — |
| 4 | 0.35 | RD/BU | 540 | Battery Positive Voltage | I | — |
| 5 | 0.35 | VT/BK | 3 | Run/Crank Ignition 1 Voltage | I | — |
| 6 | 0.5 | WH/VT | 1020 | Off/Run/Crank Ignition Voltage | I | — |

# S47D Seat Memory Switch - Driver (A45)



2717162

## Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 13969166
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

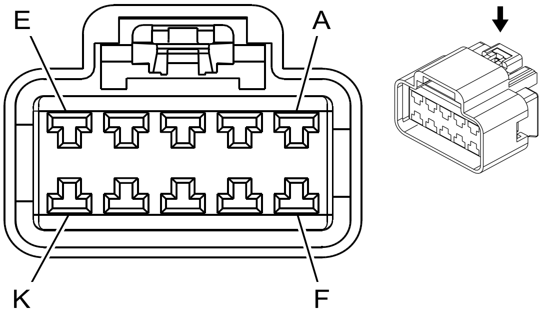
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S47D Seat Memory Switch - Driver (A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 2 | 0.35 | BK/BU | 5978 | Memory Switch Low Reference | I | — |
| 3 | 0.35 | WH | 615 | Memory Seat Switch Signal 1 | I | — |
| 4 | 0.35 | BU/GN | 614 | Memory Seat Switch Set Signal | I | — |

# S64D Seat Adjuster Switch - Driver



623046

## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 15326931
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 280 GT Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

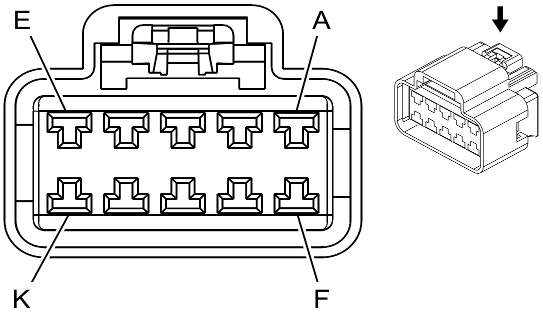
## S64D Seat Adjuster Switch - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 1.5<br>0.5 | GN/BN<br>GN/BN | 286<br>1518 | Driver Power Seat Front Vertical Motor Up Control<br>Power Seat Front Vertical Up Switch Signal | I<br>I | A2X-A45<br>A45 |
| B | 2.5 | BK | 1150 | Ground | I | — |
| C | 1.5<br>0.5 | GY/GN<br>GY/GN | 284<br>1523 | Driver Power Seat Horizontal Motor Rearward Control<br>Power Seat Horizontal Rearward Switch Signal | I<br>I | A2X-A45<br>A45 |
| D | 1.5<br>0.5 | YE/BU<br>YE/BN | 285<br>1522 | Driver Power Seat Horizontal Motor Forward Control<br>Power Seat Horizontal Forward Switch Signal | I<br>I | A2X-A45<br>A45 |
| E | 2.5<br>0.5 | RD/YE<br>BK | 5040<br>1150 | Battery Positive Voltage<br>Ground | I<br>I | A2X-A45<br>A45 |
| F | 1.5<br>0.5 | YE<br>YE | 282<br>1519 | Driver Power Seat Rear Vertical Motor Up Control<br>Power Seat Rear Vertical Up Switch Signal | I<br>I | A2X-A45<br>A45 |
| G | 1.5<br>0.5 | BU/YE<br>GN/GY | 277<br>1270 | Driver Power Seat Recline Motor Rearward Control<br>Power Seat Recline Rearward Switch Signal | I<br>I | A2X-A45<br>A45 |
| H | 1.5<br>0.5 | GN/YE<br>GY/BK | 276<br>1269 | Driver Power Seat Recline Motor Forward Control<br>Power Seat Recline Forward Switch Signal | I<br>I | A2X-A45<br>A45 |
| J | 1.5<br>0.5 | GY/BU<br>YE/BU | 283<br>1521 | Driver Power Seat Rear Vertical Motor Down Control<br>Power Seat Rear Vertical Down Switch Signal | I<br>I | A2X-A45<br>A45 |

## S64D Seat Adjuster Switch - Driver (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| K | 1.5<br>0.5 | BU/VT<br>BU/VT | 287<br>1520 | Driver Power Seat Front Vertical Motor Down Control<br>Power Seat Front Vertical Down Switch Signal | I<br>I | A2X-A45<br>A45 |

# S64P Seat Adjuster Switch - Passenger



623046

## Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 15326931
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 280 GT Series (BK)

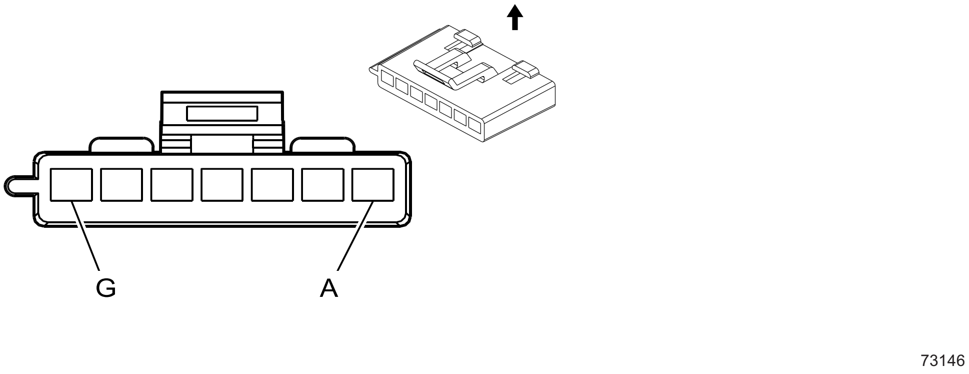
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S64P Seat Adjuster Switch - Passenger

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 1.5 | GN/BU | 298 | Passenger Power Seat Front Vertical Motor Down Control | I | — |
| B | 2.5 | BK | 1250 | Ground | I | — |
| C | 1.5 | YE/BU | 290 | Passenger Power Seat Horizontal Motor Rearward Control | I | — |
| D | 1.5 | YE/WH | 296 | Passenger Power Seat Horizontal Motor Forward Control | I | — |
| E | 2.5 | RD/BN | 1440 | Battery Positive Voltage | I | — |
| F | 1.5 | BU/WH | 289 | Passenger Power Seat Rear Vertical Motor Down Control | I | — |
| G | 1.5 | BU/BN | 77 | Passenger Power Seat Recline Motor Rearward Control | I | — |
| H | 1.5 | GN | 76 | Passenger Power Seat Recline Motor Forward Control | I | — |
| J | 1.5 | GN/WH | 288 | Passenger Power Seat Rear Vertical Motor Up Control | I | — |
| K | 1.5 | GN/VT | 297 | Passenger Power Seat Front Vertical Motor Up Control | I | — |

# S65D Seat Lumbar Support Switch - Driver (A2X-A45)



## Connector Part Information

Harness Type: Driver Seat
OEM Connector: 12052854
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 280 Metri-Pack Series (BK)

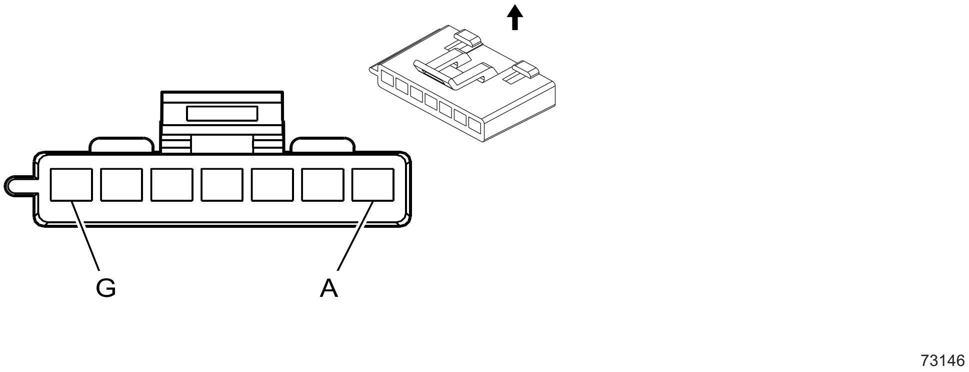
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S65D Seat Lumbar Support Switch - Driver (A2X-A45)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | — | — | — | Not Occupied | — | — |
| B | 0.75 | VT | 610 | Driver Power Seat Lumbar Motor Rearward Control | I | — |
| C | 0.75 | BU | 611 | Driver Power Seat Lumbar Motor Forward Control | I | — |
| D | — | — | — | Not Occupied | — | — |
| E | 0.75 | BK | 1150 | Ground | I | — |
| F | — | — | — | Not Occupied | — | — |
| G | 0.75 | RD/YE | 8840 | Battery Positive Voltage | I | — |

# S65P Seat Lumbar Support Switch - Passenger (A7K)



### Connector Part Information

Harness Type: Passenger Seat
OEM Connector: 12052854
Service Connector: Service by Harness - See Part Catalog
Description: 7-Way F 280 Metri-Pack Series (BK)

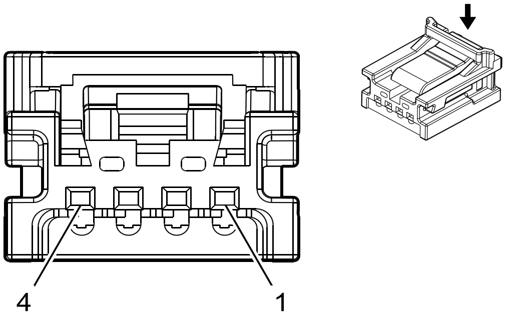
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S65P Seat Lumbar Support Switch - Passenger (A7K)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | — | — | — | Not Occupied | — | — |
| B | 0.75 | VT | 210 | Passenger Power Seat Lumbar Motor Rearward Control | I | — |
| C | 0.75 | BU | 211 | Passenger Power Seat Lumbar Motor Forward Control | I | — |
| D | — | — | — | Not Occupied | — | — |
| E | 0.75 | BK | 1250 | Ground | I | — |
| F | — | — | — | Not Occupied | — | — |
| G | 0.75 | RD/YE | 8840 | Battery Positive Voltage | I | — |

# S70E Steering Wheel Controls Switch - Radio Presets (UK3)



4215060

## Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13507113
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F Mini 50 Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S70E Steering Wheel Controls Switch - Radio Presets (UK3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 1050 | Ground | I | — |
| 2 | — | BN/RD | 4313 | Radio Favorite Forward Signal | I | — |
| 3 | — | BN/RD | 4312 | Radio Favorite Back Signal | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# S70F Steering Wheel Controls Switch - Radio Volume (UK3)

—

## Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13507115
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way

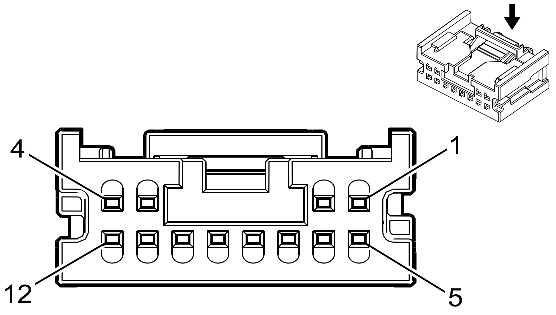
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### S70F Steering Wheel Controls Switch - Radio Volume (UK3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | BK | 1050 | Ground | I | — |
| 2 | — | GN/RD | 4314 | Radio Volume Down Signal | I | — |
| 3 | — | OG/RD | 4315 | Radio Volume Up Signal | I | — |

# S70L Steering Wheel Controls Switch - Left



3824362

## Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13507121
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F Mini 50 Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S70L Steering Wheel Controls Switch - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GN | 3040 | Battery Positive Voltage | I | — |
| 2 | —<br>— | PK<br>YE | 3893<br>6817 | LED Backlight Dimming Control 2<br>LED Backlight Dimming Control | I | —<br>UK3 |
| 3 | — | GN/OG | 1884 | Cruise Control Set/Coast/Resume/Accelerate Switch Signal | I | — |
| 4 | — | VT | 5737 | Adaptive Cruise Control Gap Up/Down Switch Signal | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | — | BK | 1050 | Ground | I | — |
| 7 | — | GY/OG | 5884 | Heated Steering Wheel Switch LED Control | I | — |
| 8 | — | GN | 5883 | Heated Steering Wheel Switch Signal | I | — |
| 9 | — | — | — | Not Occupied | — | — |
| 10 | — | BU | 1444 | 12V Reference | I | — |
| 11 - 12 | — | — | — | Not Occupied | — | — |

## S70R Steering Wheel Controls Switch - Right

—

### Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13593917
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way

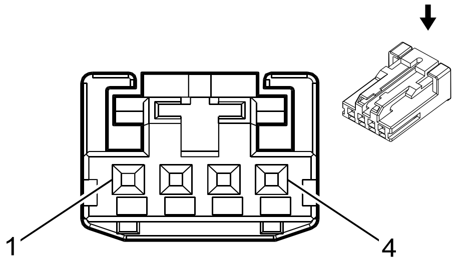
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### S70R Steering Wheel Controls Switch - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | GN | 3040 | Battery Positive Voltage | I | — |
| 2 | — | PK | 3893 | LED Backlight Dimming Control 2 | I | — |
| 3 | — | BK/BU | 3894 | Local Interconnect Network Serial Data Bus 12 | I | — |
| 6 | — | BK | 1050 | Ground | I | — |
| 7 | — | BN/RD | 4313 | Radio Favorite Forward Signal | I | — |
| 8 | — | BN/RD | 4312 | Radio Favorite Back Signal | I | — |
| 10 | — | OG/RD | 4315 | Radio Volume Up Signal | I | — |
| 11 | — | GN/RD | 4314 | Radio Volume Down Signal | I | — |

# S76 Trailer Brake Control Switch (JL1)



2717162

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13969166
Service Connector: 13587297
Description: 4-Way F 0.64 Micro-Quadlock Series (BK)

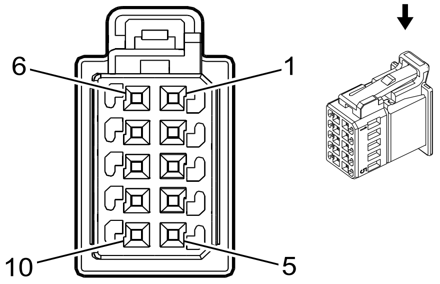
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S76 Trailer Brake Control Switch (JL1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD/GN | 5140 | Battery Positive Voltage | I | — |
| 2 | 0.35 | GN/BU | 2733 | Local Interconnect Network Bus 33 | I | — |
| 3 | 0.35 | BK/WH | 1851 | Signal Ground | I | — |
| 4 | — | — | — | Not Occupied | — | — |

# S78 Turn Signal/Multifunction Switch



2830955

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13650061
Service Connector: 19299776
Description: 10-Way F 0.64 Micro-Quadlock Series (BK)

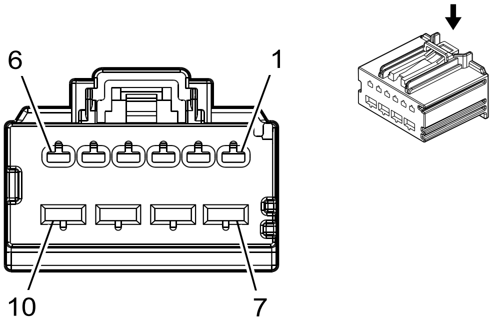
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13579993 | J-35616-64B (LT BU) | J-38125-12A | 144969-1 | Lear 25 | E | 2 |

## S78 Turn Signal/Multifunction Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/GN | 663 | Hazard Switch Left Turn Signal | I | — |
| 2 | 0.5 | VT/BU | 664 | Hazard Switch Right Turn Signal | I | — |
| 3 | 0.5 | BK/WH | 1851 | Signal Ground | I | — |
| 4 | 0.5 | WH/GY | 3849 | High Beam Auto On/Off Switch Signal | I | — |
| 5 | 0.35 | WH/BK | 94 | Windshield Washer Switch Signal | I | — |
| 6 | 0.5 | YE/BN | 307 | Headlamp Switch Flash To Pass Signal | I | — |
| 7 | 0.5 | WH | 524 | Headlamp Dimmer Switch High Beam Signal | I | — |
| 8 | 0.5 | BK/GY | 6009 | Windshield Wiper Switch Low Reference | I | — |
| 9 | 0.5 | GY | 1715 | Windshield Wiper Switch High Signal | I | — |
| 10 | 0.5 | YE/BU | 1714 | Windshield Wiper Switch Low Signal | I | — |

# S79LR Window Switch - Left Rear (Extended Cab/Crew Cab)



3791446

## Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 33175128
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Series (BK)

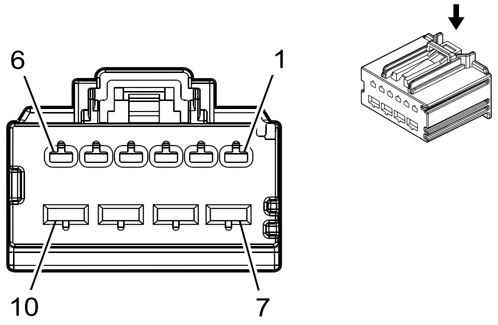
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S79LR Window Switch - Left Rear (Extended Cab/Crew Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/GY | 6135 | Local Interconnect Network Serial Data Bus 4 | I | — |
| 2 | 0.5<br>0.5 | GY<br>GN | 747<br>747 | Left Rear Door Ajar Switch Signal<br>Left Rear Door Ajar Switch Signal | I<br>I | CREW CAB<br>EXTENDED CAB |
| 3 | 0.75 | BK | 1150 | Ground | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 2.5 | BK | 1150 | Ground | II | — |
| 8 | 2.5 | RD/BU | 1842 | Battery Positive Voltage | II | — |
| 9 | 2 | BU/VT | 668 | Power Window Motor Left Rear Up Control | II | — |
| 10 | 2 | YE/BU | 669 | Power Window Motor Left Rear Down Control | II | — |

## S79P Window Switch - Passenger (AED)



3791446

### Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 33175128
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Series (BK)

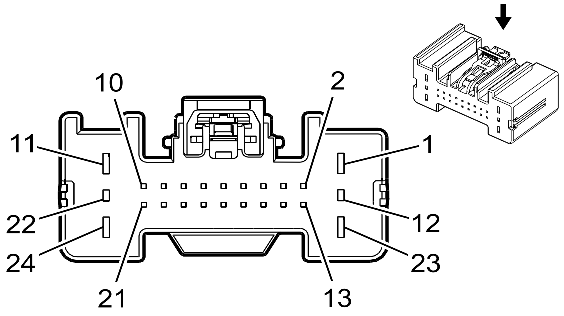
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### S79P Window Switch - Passenger (AED)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35<br>0.5 | GN/YE<br>GN/YE | 6134<br>6134 | Local Interconnect Network Serial Data Bus 3<br>Local Interconnect Network Serial Data Bus 3 | I<br>I | EXTENDED / CREW CAB<br>REGULAR CAB |
| 2 | 0.5 | GY | 746 | Right Front Door Ajar Switch Signal | I | — |
| 3 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 2.5 | BK | 1250 | Ground | II | — |
| 8 | 2.5 | RD/WH | 1340 | Battery Positive Voltage | II | — |
| 9 | 2.5 | GN/GY | 3387 | Power Window Motor Passenger Up Control | II | — |
| 10 | 2.5 | YE/BU | 3388 | Power Window Motor Passenger Down Control | II | — |

# S79P Window Switch - Passenger (AEF)



2871905

## Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 13706537
Service Connector: Service by Harness - See Part Catalog
Description: 24-Way F 0.64, 1.5, 2.8 Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| IV | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

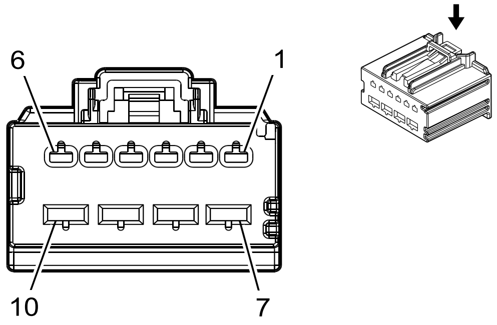
## S79P Window Switch - Passenger (AEF)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/YE | 3385 | Power Window Switch Passenger Down Signal | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | GN/BK | 3396 | Passenger Mirror Motor Right (+) Left (-) Control | IV | — |
| 4 | 0.35 | YE/VT | 3397 | Passenger Mirror Motor Up (+) Down (-) Control | IV | — |
| 5 | 0.35<br>0.5 | WH<br>WH | 3398<br>3398 | Passenger Mirror Motor Common Control<br>Passenger Mirror Motor Common Control | IV<br>IV | EXTENDED/ CREW CAB<br>REGULAR CAB |
| 6 | 0.35 | YE/RD | 3399 | Passenger Mirror Position Sensor 5V Reference | IV | — |
| 7 | 0.35 | BU/YE | 3401 | Passenger Mirror Position Sensor Up (+) Down (-) Signal | IV | — |
| 8 | 0.35 | BK/GN | 3400 | Passenger Mirror Position Sensor Low Reference | IV | — |
| 9 | 0.35 | VT/WH | 3403 | Passenger Mirror Position Sensor Left (-) Right (+) Signal | IV | — |
| 10 | 0.35 | YE | 6817 | LED Backlight Dimming Control | IV | — |
| 11 | 0.5 | YE/BK | 3384 | Power Window Switch Passenger Up Signal | II | — |
| 12 | 0.5 | BU/GY | 3414 | Passenger Mirror Motor Fold In Control | I | — |

## S79P Window Switch - Passenger (AEF) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 13 | 0.35 | VT/GY | 3386 | Power Window Switch Passenger Express Signal | IV | — |
| 14 - 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.35 | GN/WH | 7530 | Local Interconnect Network Serial Data Bus 8 | IV | — |
| 22 | 0.5 | YE/WH | 3413 | Passenger Mirror Motor Fold Out Control | I | — |
| 23 | 2.5 | RD/WH | 1340 | Battery Positive Voltage | III | — |
| 24 | 2.5 | BK | 1250 | Ground | III | — |

# S79RR Window Switch - Right Rear (Extended Cab/Crew Cab)



3791446

## Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 33175128
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Series (BK)

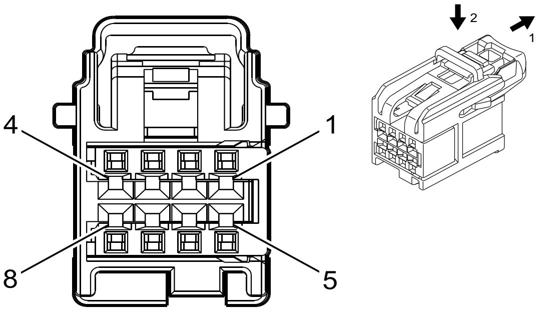
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### S79RR Window Switch - Right Rear (Extended Cab/Crew Cab)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/GY | 6135 | Local Interconnect Network Serial Data Bus 4 | I | — |
| 2 | 0.5 | GN | 748 | Right Rear Door Ajar Switch Signal | I | — |
| 3 - 6 | — | — | — | Not Occupied | — | — |
| 7 | 2.5 | BK | 1250 | Ground | II | — |
| 8 | 2.5 | RD/WH | 1340 | Battery Positive Voltage | II | — |
| 9 | 2 | BU/GY | 670 | Power Window Motor Right Rear Up Control | II | — |
| 10 | 2 | GN/BK | 671 | Power Window Motor Right Rear Down Control | II | — |

# S86 Vehicle Stability Control Switch



4935776

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15526972
Service Connector: 19370429
Description: 8-Way F 0.64 OCS Series (BK)

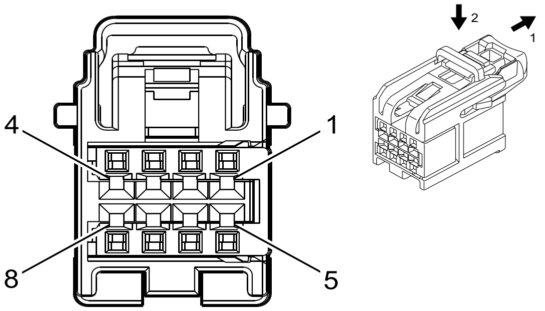
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S86 Vehicle Stability Control Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU/VT | 1788 | Traction Control Switch Signal 1 | I | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 3 | 0.35 | BN | 7291 | Major Endgate Release Switch Signal Interior | I | QT5 |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | BK | 1050 | Ground | I | — |
| 7 | 0.35 | GN/WH | 111 | Hazard Switch Signal | I | — |
| 8 | 0.35 | GY | 1198 | Endgate Release Switch Analog Signal Interior | I | QT6 |

# S126 Drive Mode Select Switch (URC)



4232228

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 15526973
Service Connector: 19353873
Description: 8-Way F 0.64 OCS Series (GY)

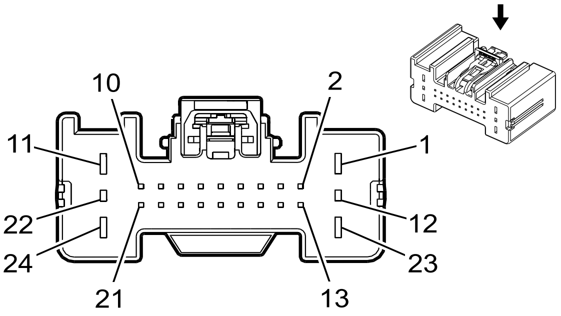
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S126 Drive Mode Select Switch (URC)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | WH/BN | 2203 | Enhanced Driver Mode 2 Switch Signal | I | — |
| 2 | 0.35 | GY | 4109 | Driver Mode Switch 5V Reference | I | — |
| 3 | 0.35 | BK/GY | 2204 | Enhanced Driver Mode 1 Switch Low Reference | I | — |
| 4 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 5 | 0.35 | BK | 1850 | Ground | I | — |
| 6 | 0.35 | VT/BN | 300 | Run Ignition 3 Voltage | I | — |
| 7 | 0.35 | BN | 1560 | Neutral Indicator Control | I | — |
| 8 | — | — | — | Not Occupied | — | — |

## S146 Window/Outside Rearview Mirror Switch - Driver



2871905

### Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 13706537
Service Connector: Service by Harness - See Part Catalog
Description: 24-Way F 0.64, 1.5, 2.8 Series (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

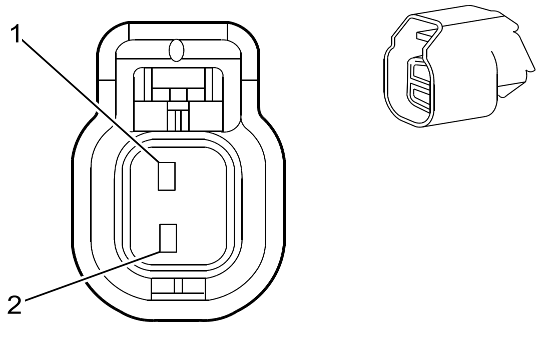
### S146 Window/Outside Rearview Mirror Switch - Driver

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY | 3380 | Power Window Switch Driver Down Signal | II | — |
| 2 | 0.35 | YE/VT | 3397 | Passenger Mirror Motor Up (+) Down (-) Control | III | — |
| 3 | 0.5 | WH | 3398 | Passenger Mirror Motor Common Control | III | — |
| 4 | 0.35 | GN/BK | 3396 | Passenger Mirror Motor Right (+) Left (-) Control | III | — |
| 5 | 0.35 | GN | 3381 | Power Window Switch Driver Express Signal | III | — |
| 6 | 0.35 | BN/BK | 3389 | Driver Mirror Motor Right (+) Left (-) Control | III | — |
| 7 | 0.35 | VT/BU | 3390 | Driver Mirror Motor Up (+) Down (-) Control | III | — |
| 8 | 0.35 | YE/BN | 3391 | Driver Mirror Motor Common Control | III | — |
| 9 | 0.5 | GN/YE | 6134 | Local Interconnect Network Serial Data Bus 3 | III | — |
| 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.5 | GN/WH | 3379 | Power Window Switch Driver Up Signal | II | — |
| 12 | 0.35 | WH/GN | 3412 | Driver Mirror Motor Fold In Control | I | — |
| 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.35 | WH/VT | 3270 | Driver Door Lock Motor Status Signal | III | — |
| 15 | 0.35 | BU/VT | 1124 | Door Lock Key Switch Unlock Signal | III | — |
| 16 | 0.35 | WH/YE | 3395 | Driver Mirror Position Sensor Left (-) Right (+) Signal | III | — |
| 17 | 0.5 | VT/RD | 3392 | Driver Mirror Position Sensor 5V Reference | III | — |

## S146 Window/Outside Rearview Mirror Switch - Driver (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 18 | 0.35 | GY/BN | 3394 | Driver Mirror Position Sensor Up (+) Down (-) Signal | III | — |
| 19 | 0.35 | BK/BN | 3393 | Driver Mirror Position Sensor Low Reference | III | — |
| 20 | — | — | — | Not Occupied | — | — |
| 21 | 0.5 | GN/WH | 7530 | Local Interconnect Network Serial Data Bus 8 | III | — |
| 22 | 0.35 | GY/WH | 3411 | Driver Mirror Motor Fold Out Control | I | — |
| 23 | 0.5 | RD/VT | 1940 | Battery Positive Voltage | II | — |
| 24 | 0.35 | BK | 1150 | Ground | II | — |

# S148L Assist Step Kick Switch - Left (BRS)



### Connector Part Information

Harness Type: Left Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

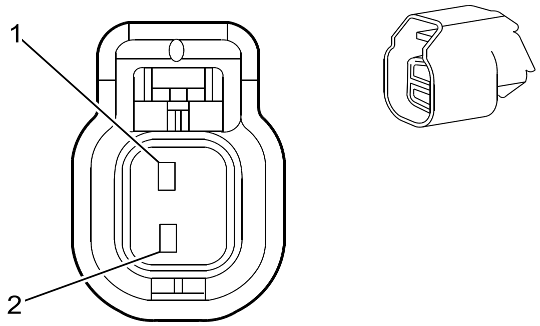
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S148L Assist Step Kick Switch - Left (BRS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | RD | 4746 | Articulating Running Board Left Kick Switch Signal | I | — |
| 2 | — | BK | 685 | Articulating Running Board Kick Switch Return | I | — |

# S148R Assist Step Kick Switch - Right (BRS)



1413014

## Connector Part Information

Harness Type: Right Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way

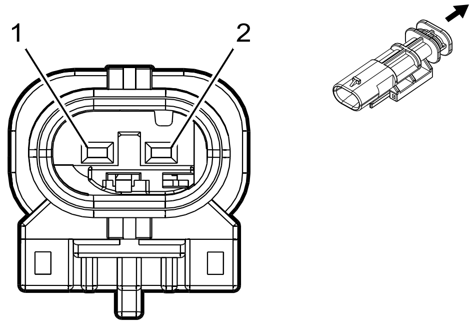
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S148R Assist Step Kick Switch - Right (BRS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | RD | 4747 | Articulating Running Board Right Kick Switch Signal | I | — |
| 2 | — | BK | 685 | Articulating Running Board Kick Switch Return | I | — |

# S157 Pickup Box Endgate Unlatch Switch



4994411

## Connector Part Information

Harness Type: Endgate
OEM Connector: 35068608
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (GY)

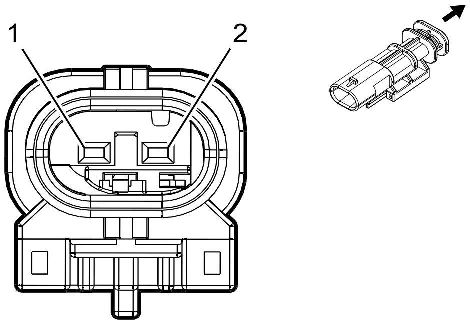
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S157 Pickup Box Endgate Unlatch Switch

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GY | 7292 | Major Endgate Release Switch Signal Exterior | I | — |
| 2 | 0.75 | BK | 1450 | Ground | I | (QK1/QK2)+QT5 |

# S159E Pickup Box Endgate Control Switch - Exterior (QK1)



4994411

## Connector Part Information

Harness Type: Endgate
OEM Connector: 35068608
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 MCON Series (GY)

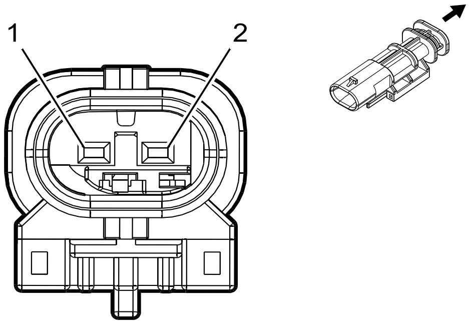
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S159E Pickup Box Endgate Control Switch - Exterior (QK1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE | 1144 | Endgate Release Switch Discrete Signal Exterior | I | — |
| 2 | 0.75 | BK | 1450 | Ground | I | — |

# S159E Pickup Box Endgate Control Switch - Exterior (QK2)



4994410

## Connector Part Information

Harness Type: Endgate

OEM Connector: 33365831

Service Connector: Service by Harness - See Part Catalog

Description: 2-Way M 1.2 MCON Series (GY)

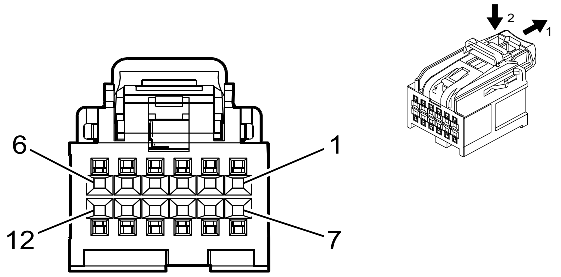
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## S159E Pickup Box Endgate Control Switch - Exterior (QK2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | YE | 7294 | Minor Endgate Release Switch Discrete Signal Exterior | I | — |
| 2 | 0.75 | BK | 1450 | Ground | I | QT6 |

# S171L Instrument Panel Center Accessory Function Switch - Left



## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35016616
Service Connector: 13519750
Description: 12-Way F 0.64 OCS Series (BK)

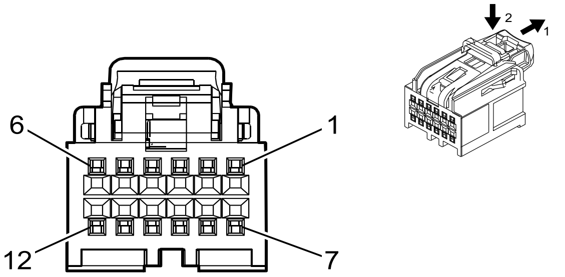
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300660 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## S171L Instrument Panel Center Accessory Function Switch - Left

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GY/GN | 2555 | Rear Park Assist Disable Signal | I | UD5/UD7 |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 3 | 0.5 | BU/WH | 3119 | Roof Rail Air Bag Defeat Switch Signal | I | — |
| 4 | 0.35 | GY/WH | 3153 | Lane Departure Warning Disable Switch Signal | I | UEU/UHX |
| 5 | 0.35 | WH | 3152 | Lane Departure Warning Indicator Control | I | UEU/UHX |
| 6 | 0.35<br>0.35 | BU/YE<br>BU/YE | 6844<br>7176 | ABS/TCS Hill Descent Control Switch Signal<br>All Windows Open Switch Signal | I<br>I | JHD<br>-JHD |
| 7 | 0.5 | WH | 6816 | Indicator Dimming Control | I | — |
| 8 | 0.35 | GN/BN | 5852 | Rear Park Assist LED Disable Signal | I | UD5/UD7 |
| 9 | 0.5 | BK | 1050 | Ground | I | — |
| 10 | 0.5 | BN/WH | 3895 | Roof Rail Air Bag Defeat Switch Low Reference | I | — |
| 11 | 0.35 | BU | 1110 | Auto Stop Start Indicator Control | I | KL9+URC |
| 12 | 0.35 | BU | 1111 | Auto Stop Start Switch Signal | I | KL9+URC |

# S171R Instrument Panel Center Accessory Function Switch - Right



4997362

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35016613
Service Connector: 13519752
Description: 12-Way F 0.64 OCS Series (BN)

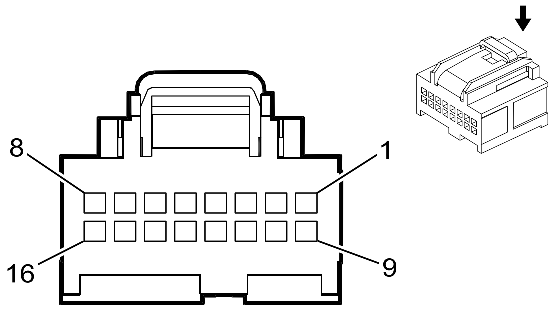
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300660 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## S171R Instrument Panel Center Accessory Function Switch - Right

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35<br>0.35 | GY/WH<br>GY/WH | 4630<br>7176 | AC Power Outlet Switch Signal<br>All Windows Open Switch Signal | I<br>I | KC9/KCA<br>WLD+OPT1 |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 3 | 0.35<br>0.35 | BU/YE<br>BU/YE | 6844<br>7176 | ABS/TCS Hill Descent Control Switch Signal<br>All Windows Open Switch Signal | I<br>I | JHD+URC<br>WLD+OPT2 |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | BU | 1110 | Auto Stop Start Indicator Control | I | KL9-URC |
| 7 | — | — | — | Not Occupied | — | — |
| 8 | 0.5 | BN/WH | 7462 | Running Boards Disable Signal | I | BRS |
| 9 | 0.5 | BK | 1050 | Ground | I | — |
| 10 | 0.35 | WH | 6816 | Indicator Dimming Control | I | — |
| 11 | 0.35 | YE | 7755 | AC Power Outlet Status Indicator Control | I | KI4/KI5 |
| 12 | 0.35<br>0.35 | BU<br>BU/GY | 1111<br>553 | Auto Stop Start Switch Signal<br>Shift Select Switch Performance Signal | I<br>I | KL9-URC<br>-URC |

## S172 Auxiliary Multifunction Switch (9L7)



3240102

### Connector Part Information

Harness Type: Auxiliary Instrument Panel
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F 0.64 OCS Series (BK)

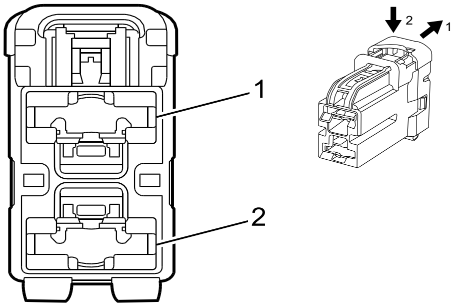
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### S172 Auxiliary Multifunction Switch (9L7)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 3 | 0.35 | WH | 6816 | Indicator Dimming Control | I | — |
| 4 - 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.35 | BK | 961 | Auxiliary 1 Switch Signal | I | — |
| 7 | 0.35 | BK | 962 | Auxiliary 2 Switch Signal | I | — |
| 8 | 0.35 | BK | 963 | Auxiliary 3 Switch Signal | I | — |
| 9 | 0.35<br>0.35 | BK<br>BK | 6821<br>964 | Surveillance Switch Signal<br>Auxiliary 4 Switch Signal | I | —<br>— |
| 10 | 0.5 | WH/BK | 5990 | Emergency Lamp Switch Signal | I | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.75 | BK | 1050 | Ground | I | — |
| 13 - 16 | — | — | — | Not Occupied | — | — |

# T1 Accessory DC/AC Power Inverter Module X1 (KI4/KI5)



2453116

## Connector Part Information

Harness Type: Body
OEM Connector: 13581928
Service Connector: Service By Harness - See Part Catalog
Description: 2-Way F 9.5 Series (BK)

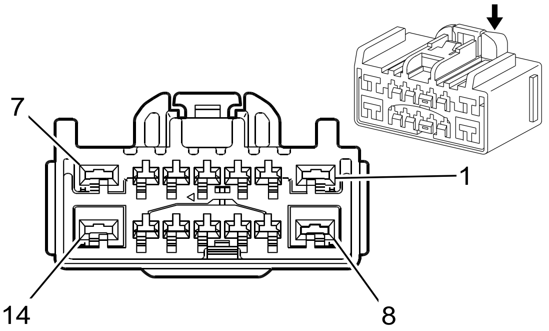
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-22 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T1 Accessory DC/AC Power Inverter Module X1 (KI4/KI5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 5 | BN/BK | 4629 | DC/AC Inverter Control | I | — |
| 2 | 5 | BK | 1150 | Ground | I | — |

# T1 Accessory DC/AC Power Inverter Module X2 (KI4/KI5)



1540775

## Connector Part Information

Harness Type: Rear Body Extension
OEM Connector: 33356826
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way F 1.5, 2.8 Series (BU)

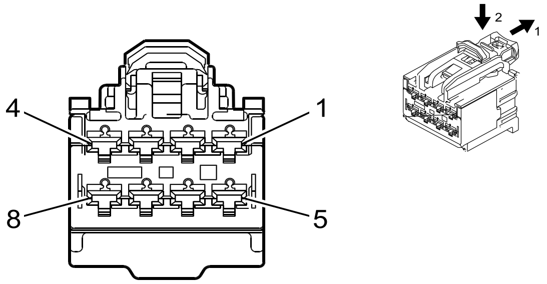
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T1 Accessory DC/AC Power Inverter Module X2 (KI4/KI5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 5683 | 120 V AC Phase A | II | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | VT/YE | 5985 | Accessory Wakeup Serial Data | I | — |
| 4 | 0.35 | WH/GN | 4628 | DC/AC Inverter Relay Control | I | — |
| 5 | 0.35 | BU/BN | 6807 | DC To AC Inverter Control | I | — |
| 6 | — | — | — | Not Occupied | — | — |
| 7 | 0.75 | BK/WH | 2264 | 120 VAC Phase A 2 | II | — |
| 8 | 0.75 | RD | 5684 | 120 V AC Phase B | II | — |
| 9 | 0.35 | Bare | 514 | Low Reference | I | — |
| 10 | 0.35 | GN | 5060 | Low Speed GMLAN Serial Data | I | — |
| 11 | — | — | — | Not Occupied | — | — |
| 12 | 0.75 | GN/BN | 2266 | DC To AC Inverter Control 2 | I | — |
| 13 | 0.35 | Bare | 2257 | Drain Wire | I | — |
| 14 | 0.75 | RD/WH | 2265 | 120 VAC Phase B 2 | II | — |

# T3 Audio Amplifier X1 (UQA)



4875738

## Connector Part Information

Harness Type: Body
OEM Connector: 33223792
Service Connector: 19369366
Description: 8-Way F 2.8 OCS Series (BK)

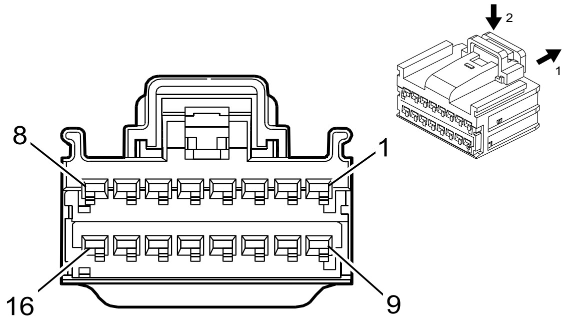
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T3 Audio Amplifier X1 (UQA)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 2.5 | BU/GY | 346 | Left/Rear Subwoofer Speaker Control (+) | I | — |
| 2 | 0.75 | YE | 200 | Right Front Speaker Control (+) 1 | I | — |
| 3 | 0.75 | BU | 201 | Left Front Speaker Control (+) 1 | I | — |
| 4 | 2.5 | RD/YE | 3740 | Battery Positive Voltage | I | — |
| 5 | 2.5 | GN/BK | 1794 | Left/Rear Subwoofer Speaker (-) Low Reference | I | — |
| 6 | 0.75 | YE/BK | 117 | Right Front Speaker Signal (-) 1 | I | — |
| 7 | 0.75 | BN/BU | 118 | Left Front Speaker Signal (-) 1 | I | — |
| 8 | 2.5 | BK/WH | 2751 | Signal Ground | I | — |

# T3 Audio Amplifier X2 (UQA)



4332214

## Connector Part Information

Harness Type: Body
OEM Connector: 15512506
Service Connector: 13591061
Description: 16-Way F 1.5 OCS Series (BK)

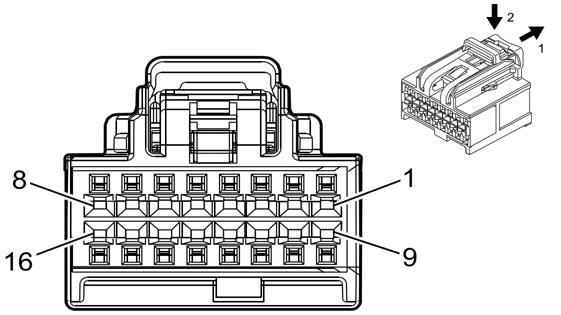
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19301767 | J-35616-2A (GY) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## T3 Audio Amplifier X2 (UQA)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | — | — | Not Occupied | — | — |
| 2 | 0.75 | BN/BK | 1953 | Right Front Midrange Speaker (-) Low Reference | I | — |
| 3 | 0.75 | BU/VT | 1857 | Left Front Midrange Speaker Control (+) | I | — |
| 4 | 0.5 | WH | 46 | Right Rear Speaker Control (+) | I | — |
| 5 | 0.5 | GN | 199 | Left Rear Speaker Control (+) | I | — |
| 6 - 9 | — | — | — | Not Occupied | — | — |
| 10 | 0.75 | WH/YE | 1853 | Right Front Midrange Speaker Control (+) | I | — |
| 11 | 0.75 | BU/BN | 1957 | Left Front Midrange Speaker (-) Low Reference | I | — |
| 12 | 0.5 | BU/BK | 115 | Right Rear Speaker Signal (-) | I | — |
| 13 | 0.5 | GN/BK | 116 | Left Rear Speaker Signal (-) | I | — |
| 14 - 16 | — | — | — | Not Occupied | — | — |

## T3 Audio Amplifier X3 (UQA)



4873243

### Connector Part Information

Harness Type: Body
OEM Connector: 35016343
Service Connector: 13519738
Description: 16-Way F 0.64 OCS Series (BK)

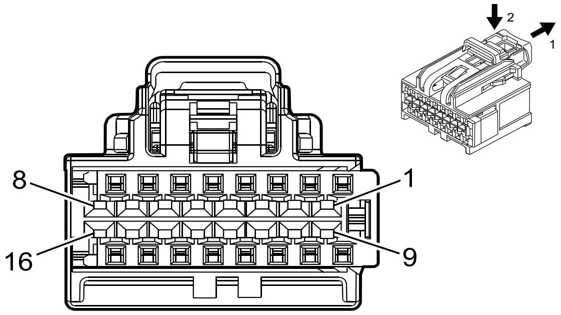
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300660 | J-35616-64B (LT BU) | J-38125-12A | Not Available | Not Available | Not Available | Not Available |

### T3 Audio Amplifier X3 (UQA)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | GY/GN | 1102 | Low Speed GMLAN Serial Data #2 | I | — |
| 2 - 16 | — | — | — | Not Occupied | — | — |

# T3 Audio Amplifier X4 (UQA)



4256181

## Connector Part Information

Harness Type: Body
OEM Connector: 35016345
Service Connector: 13519740
Description: 16-Way F 0.64 OCS Series (BN)

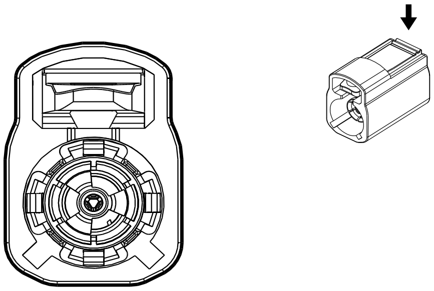
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300660 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## T3 Audio Amplifier X4 (UQA)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | GY/BK | 7215 | Ethernet Bus 6 (+) | I | — |
| 4 | 0.35 | BN/BK | 7214 | Ethernet Bus 6 (-) | I | — |
| 5 - 16 | — | — | — | Not Occupied | — | — |

# T4G Cellular Phone, Navigation, and Digital Radio Antenna X2 (U2K)



4044034

## Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 13581700
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type

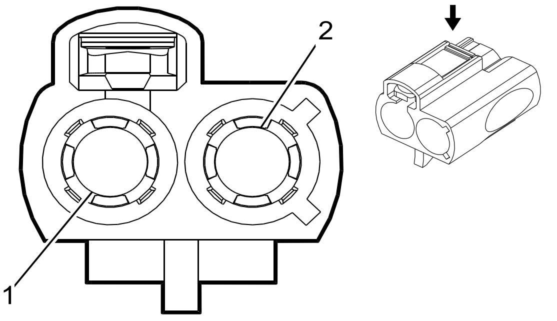
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T4G Cellular Phone, Navigation, and Digital Radio Antenna X2 (U2K)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | (XM +/-HD) Coaxial Antenna XM Signal | I | — |

# T4G Cellular Phone, Navigation, and Digital Radio Antenna X1 (UE1)



3418133

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13583911
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F Coax Type (PU)

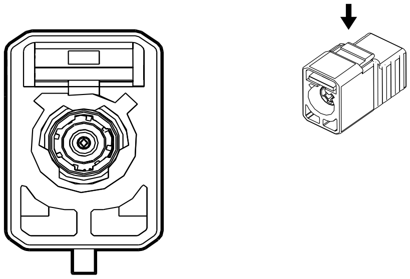
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### T4G Cellular Phone, Navigation, and Digital Radio Antenna X1 (UE1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | — | COAX | — | Coaxial Antenna Cell/GPS combined Signal | I | — |
| 2 | — | COAX | — | Coaxial Antenna Cell Phone Signal | I | — |

## T4M Radio Antenna



### Connector Part Information

Harness Type: Radio Antenna COAX
OEM Connector: 13581687
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BK)

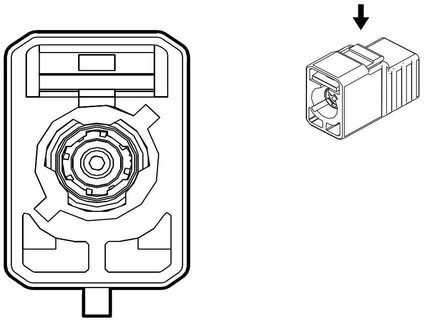
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### T4M Radio Antenna

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | (AM/FM) Antenna RF Signal | I | — |

# T4P Navigation Antenna ((IOS/IOT)-UE1)



## Connector Part Information

Harness Type: Instrument Panel COAX
OEM Connector: 13581690
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BU)

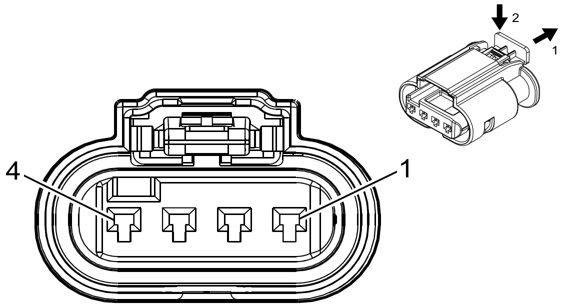
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T4P Navigation Antenna ((IOS/IOT)-UE1)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | (GPS only) Coaxial Antenna GPS Signal | I | — |

# T8A Ignition Coil 1 (L3B)



4994577

## Connector Part Information

Harness Type: Engine
OEM Connector: 33351631
Service Connector: 19371202
Description: 4-Way F 1.2 MCON-CB Series, Sealed (BK)

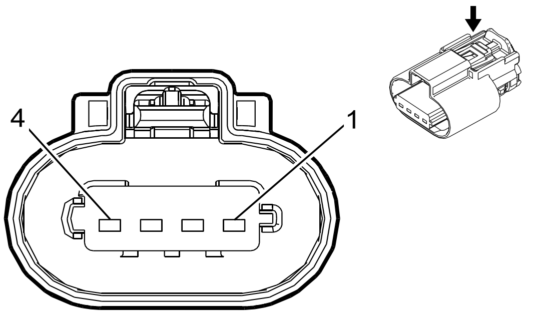
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T8A Ignition Coil 1 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 450 | Ground | I | — |
| 2 | 0.5 | BK/BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.5 | BU/VT | 2121 | Ignition Control 1 | I | — |
| 4 | 0.75 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | I | — |

# T8A Ignition Coil 1 (L82/L84/L87/LV3)



3240115

## Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

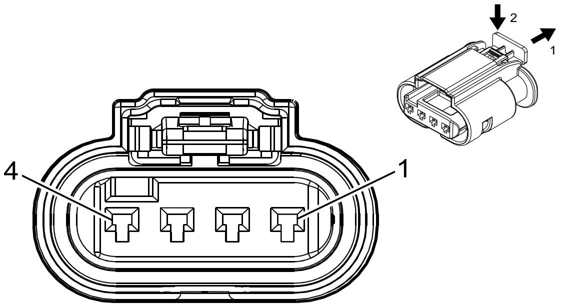
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T8A Ignition Coil 1 (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75<br>0.75 | BK<br>BK | 4550<br>4450 | Ground<br>Ground | I<br>I | L84/L87<br>LV3 |
| 2 | 0.5 | BK/BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.5 | BU/VT | 2121 | Ignition Control 1 | I | — |
| 4 | 0.75 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | I | — |

# T8B Ignition Coil 2 (L3B)



4994577

## Connector Part Information

Harness Type: Engine
OEM Connector: 33351631
Service Connector: 19371202
Description: 4-Way F 1.2 MCON-CB Series, Sealed (BK)

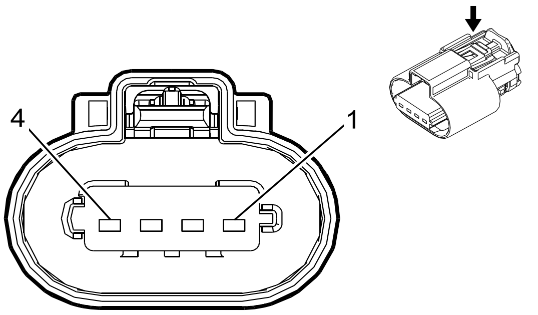
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T8B Ignition Coil 2 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 450 | Ground | I | — |
| 2 | 0.5 | BK/BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.5 | BU/WH | 2122 | Ignition Control 2 | I | — |
| 4 | 0.75 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | I | — |

# T8B Ignition Coil 2 (L82/L84/L87/LV3)



3240115

## Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

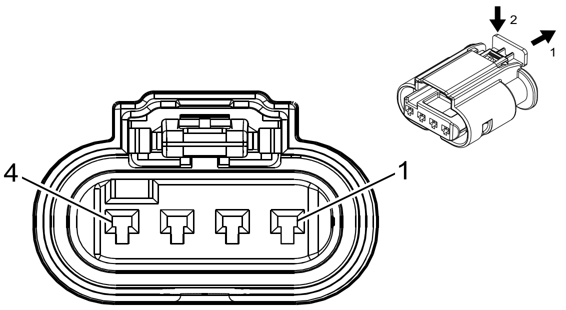
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T8B Ignition Coil 2 (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75<br>0.75 | BK<br>BK | 4550<br>350 | Ground<br>Ground | I<br>I | L84/L87<br>LV3 |
| 2 | 0.5 | BK/GY | 2130 | Ignition Control Low Reference Bank 2 | I | — |
| 3 | 0.5 | BU/WH | 2122 | Ignition Control 2 | I | — |
| 4 | 0.75 | VT/BU | 5292 | Powertrain Main Relay Fused Supply 3 | I | — |

# T8C Ignition Coil 3 (L3B)



4994577

## Connector Part Information

Harness Type: Engine
OEM Connector: 33351631
Service Connector: 19371202
Description: 4-Way F 1.2 MCON-CB Series, Sealed (BK)

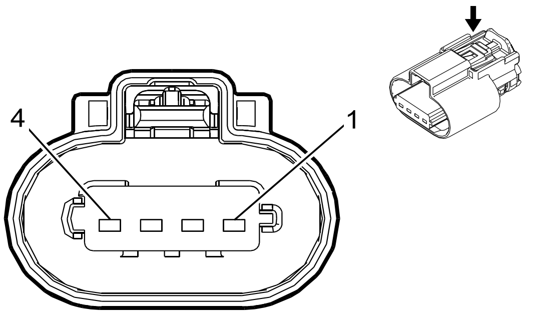
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T8C Ignition Coil 3 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 450 | Ground | I | — |
| 2 | 0.5 | BK/BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.5 | GN/BU | 2123 | Ignition Control 3 | I | — |
| 4 | 0.75 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | I | — |

# T8C Ignition Coil 3 (L82/L84/L87/LV3)



3240115

## Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

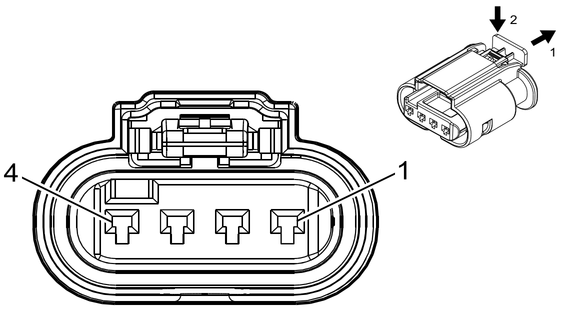
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T8C Ignition Coil 3 (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75<br>0.75 | BK<br>BK | 4550<br>4450 | Ground<br>Ground | I<br>I | L84/L87<br>LV3 |
| 2 | 0.5 | BK/BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.5 | GN/BU | 2123 | Ignition Control 3 | I | — |
| 4 | 0.75 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | I | — |

# T8D Ignition Coil 4 (L3B)



4994577

## Connector Part Information

Harness Type: Engine
OEM Connector: 33351631
Service Connector: 19371202
Description: 4-Way F 1.2 MCON-CB Series, Sealed (BK)

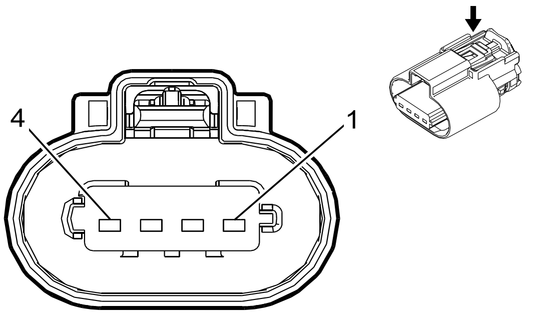
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T8D Ignition Coil 4 (L3B)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 450 | Ground | I | — |
| 2 | 0.5 | BK/BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.5 | YE/BU | 2124 | Ignition Control 4 | I | — |
| 4 | 0.75 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | I | — |

## T8D Ignition Coil 4 (L82/L84/L87/LV3)



3240115

### Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

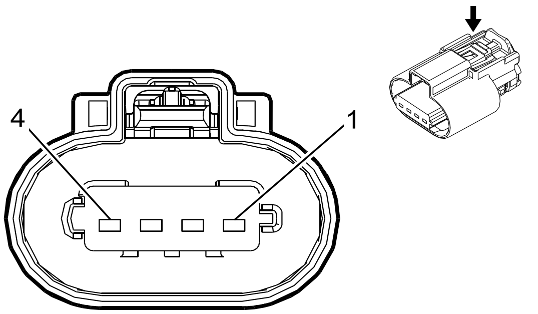
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### T8D Ignition Coil 4 (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75<br>0.75 | BK<br>BK | 4550<br>4450 | Ground<br>Ground | I<br>I | L82/L84/L87<br>LV3 |
| 2 | 0.5 | BK/GY | 2130 | Ignition Control Low Reference Bank 2 | I | — |
| 3 | 0.5 | YE/BU | 2124 | Ignition Control 4 | I | — |
| 4 | 0.75 | VT/BU | 5292 | Powertrain Main Relay Fused Supply 3 | I | — |

# T8E Ignition Coil 5 (L82/L84/L87/LV3)



3240115

## Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

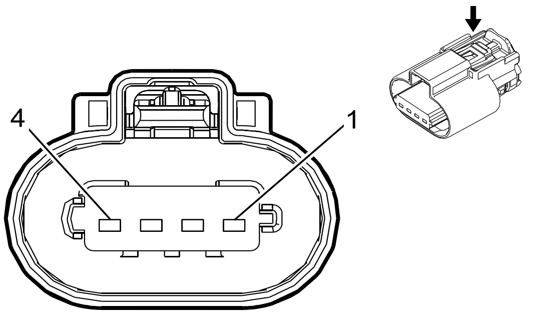
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T8E Ignition Coil 5 (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75<br>0.75 | BK<br>BK | 4550<br>4450 | Ground<br>Ground | I<br>I | L84/L87<br>LV3 |
| 2 | 0.5 | BK/BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.5 | BU/GY | 2125 | Ignition Control 5 | I | — |
| 4 | 0.75 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | I | — |

# T8F Ignition Coil 6 (L82/L84/L87/LV3)



3240115

## Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

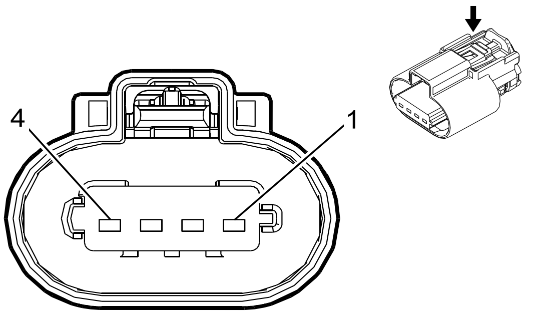
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T8F Ignition Coil 6 (L82/L84/L87/LV3)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75<br>0.5 | BK<br>BK | 4550<br>4450 | Ground<br>Ground | I<br>I | L82/L84/L87<br>LV3 |
| 2 | 0.5 | BK/GY | 2130 | Ignition Control Low Reference Bank 2 | I | — |
| 3 | 0.5 | BN/BU | 2126 | Ignition Control 6 | I | — |
| 4 | 0.75<br>0.5 | VT/BU<br>VT/BU | 5292<br>5292 | Powertrain Main Relay Fused Supply 3<br>Powertrain Main Relay Fused Supply 3 | I<br>I | L82/L84/L87<br>LV3 |

## T8G Ignition Coil 7 (L82/L84/L87)



3240115

### Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

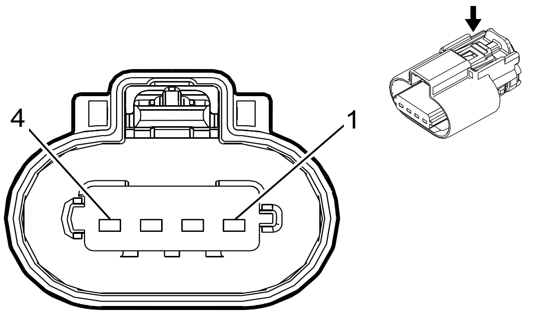
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### T8G Ignition Coil 7 (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 4550 | Ground | I | — |
| 2 | 0.5 | BK/BU | 2129 | Ignition Control Low Reference Bank 1 | I | — |
| 3 | 0.5 | GN/GY | 2127 | Ignition Control 7 | I | — |
| 4 | 0.75 | VT/BU | 5291 | Powertrain Main Relay Fused Supply 2 | I | — |

# T8H Ignition Coil 8 (L82/L84/L87)



3240115

## Connector Part Information

Harness Type: Engine
OEM Connector: 13863211
Service Connector: 19301722
Description: 4-Way F 150 MX Series, Sealed (BK)

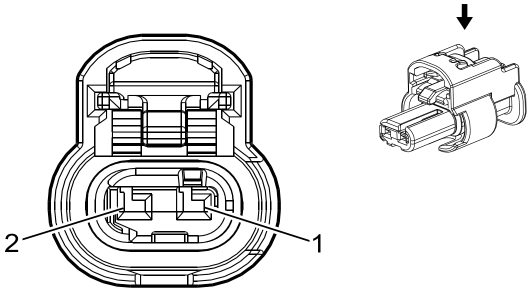
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T8H Ignition Coil 8 (L82/L84/L87)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 4550 | Ground | I | — |
| 2 | 0.5 | BK/GY | 2130 | Ignition Control Low Reference Bank 2 | I | — |
| 3 | 0.5 | VT/WH | 2128 | Ignition Control 8 | I | — |
| 4 | 0.75 | VT/BU | 5292 | Powertrain Main Relay Fused Supply 3 | I | — |

# T10B Keyless Entry Antenna - Instrument Panel Compartment (BTM)



4649903

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33327048
Service Connector: 19366858
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

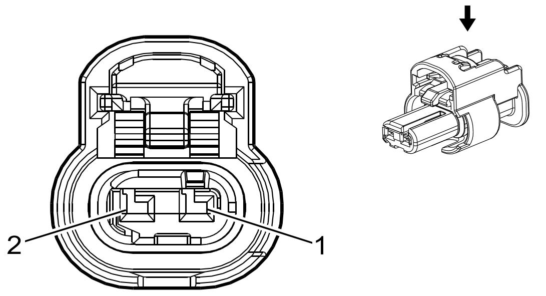
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T10B Keyless Entry Antenna - Instrument Panel Compartment (BTM)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/BK | 3552 | Passive Start Interior Antenna 1 Signal Hi | I | — |
| 2 | 0.5 | WH | 3553 | Passive Start Interior Antenna 1 Signal Lo | I | — |

# T10E Keyless Entry Antenna - Rear Compartment (BTM)



## Connector Part Information

Harness Type: Chassis
OEM Connector: 33327048
Service Connector: 19366858
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

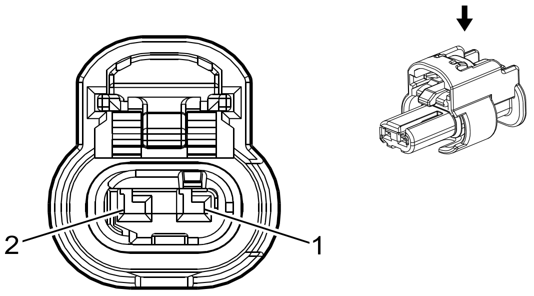
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T10E Keyless Entry Antenna - Rear Compartment (BTM)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/GN | 3568 | Passive Entry Rear Closure Antenna Signal Hi | I | — |
| 2 | 0.5 | GN/GY | 3569 | Passive Entry Rear Closure Antenna Signal Lo | I | — |

# T10J Keyless Entry Antenna - Center Console Front (BTM+D07)



## Connector Part Information

Harness Type: Floor Console
OEM Connector: 33327048
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

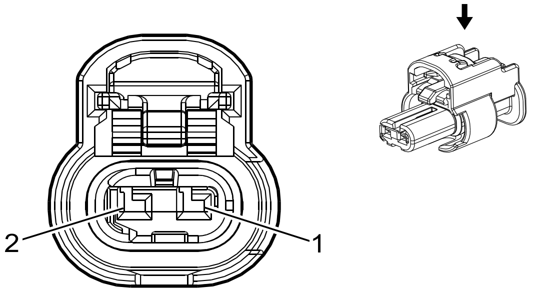
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T10J Keyless Entry Antenna - Center Console Front (BTM+D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 3554 | Passive Start Interior Antenna 2 Signal Hi | I | — |
| 2 | 0.5 | GY/BK | 3555 | Passive Start Interior Antenna 2 Signal Lo | I | — |

# T10V Keyless Entry Antenna - Front Middle Seat (BTM-D07)



## Connector Part Information

Harness Type: Front Middle Seat
OEM Connector: 1-2296694-2
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

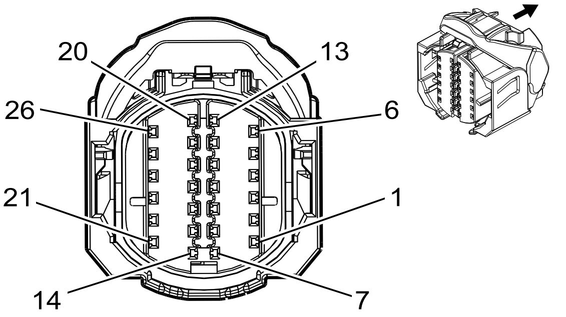
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T10V Keyless Entry Antenna - Front Middle Seat (BTM-D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BU | 3554 | Passive Start Interior Antenna 2 Signal Hi | I | — |
| 2 | 0.5 | GY/BK | 3555 | Passive Start Interior Antenna 2 Signal Lo | I | — |

## T12 Automatic Transmission Assembly X1 (MQB)



4420489

### Connector Part Information

Harness Type: Engine
OEM Connector: 33178413
Service Connector: 13596549
Description: 26-Way F 1.2 MCON-CB Series, Sealed (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19331730 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19331733 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

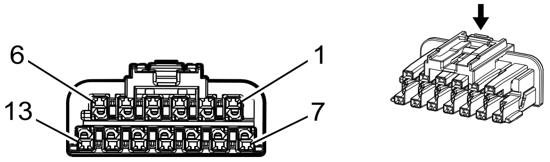
### T12 Automatic Transmission Assembly X1 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/YE | 6353 | Input Speed Signal | II | — |
| 2 | 0.5 | GN/VT | 4510 | Transmission Intermediate Speed Signal | II | — |
| 3 | 0.5 | BN/WH | 6254 | Transmission Input Speed Sensor Signal | II | — |
| 4 | 0.5 | GY/BU | 6358 | Output Speed Signal | II | — |
| 5 | 0.5 | VT/BU | 5724 | Ignition Mode Switch Mode Control | II | — |
| 6 | 0.5 | WH/BU | 5726 | Ignition Mode Switch Mode Control Backup | II | — |
| 7 | 0.5 | YE/GN | 4170 | Transmission Position Sensor B 9V Reference | II | — |
| 8 | 0.5 | YE/BU | 4171 | Transmission Position Sensor A 9V Reference | II | — |
| 9 | 0.5 | GY/BN | 6388 | Transmission High Side Driver 2 Signal | II | — |
| 10 | 0.75 | RD/VT | 7940 | Battery Positive Voltage | II | — |
| 11 | 0.5 | GN/GY | 6387 | Transmission High Side Driver 1 Signal Driver | II | — |
| 12 | 0.5 | WH/RD | 480 | Engine Control Sensors 5 Volt Reference (2) | II | — |
| 13 | 0.5 | BN/WH | 585 | Transmission Oil Temperature Sensor Signal | II | — |
| 14 | 0.5 | YE/BN | 6404 | Clutch E Control | II | — |
| 15 | 0.5 | GY/GN | 6403 | Clutch D Control | II | — |
| 16 | 0.5 | GY | 6402 | Clutch C Control | II | — |
| 17 | 1 | BK | 4450 | Ground | I | — |
| 18 | 0.5 | GN/WH | 2968 | Transmission Auxiliary Oil Pump Control | II | — |
| 19 | 0.5 | GN/BK | 7819 | Default Disable Solenoid Control | II | — |

## T12 Automatic Transmission Assembly X1 (MQB) (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 20 | 0.5 | BK/GN | 580 | Engine Control Sensors Low Reference (2) | II | — |
| 21 | 0.5 | VT | 4509 | Transmission Clutch F Control | II | — |
| 22 | 0.5 | WH/BU | 4507 | Transmission Clutch H Control | II | — |
| 23 | 0.5 | WH | 4508 | Transmission Clutch G Control | II | — |
| 24 | 0.5 | GN/WH | 1530 | Transmission Mainline Pressure Solenoid Control | II | — |
| 25 | 0.5 | VT/WH | 422 | Torque Converter Clutch Solenoid Control | II | — |
| 26 | 0.5 | BK/BN | 586 | Transmission Oil Temperature Sensor Low Reference | II | — |

## T12 Automatic Transmission Assembly X2 (MQB)



4757907

### Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2203990-1
Service Connector: Service by Harness - See Part Catalog
Description: 13-Way F 1.2 MCON Series (BN)

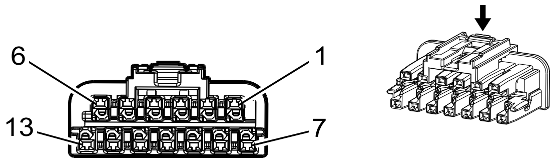
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### T12 Automatic Transmission Assembly X2 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/GY | 5726 | Ignition Mode Switch Mode Control Backup | I | — |
| 2 | 0.5 | YE | 5724 | Ignition Mode Switch Mode Control | I | — |
| 3 | 0.5 | YE/OG | 6358 | Output Speed Signal | I | — |
| 4 | 0.5 | WH/BU | 4510 | Transmission Intermediate Speed Signal | I | — |
| 5 | 0.5 | VT/GN | 4510 | Transmission Intermediate Speed Signal | I | — |
| 6 | 0.5 | WH/VT | 6353 | Input Speed Signal | I | — |
| 7 | 0.5 | BN/YE | 585 | Transmission Oil Temperature Sensor Signal | I | — |
| 8 | 0.5 | OG | 480 | Engine Control Sensors 5 Volt Reference (2) | I | — |
| 9 | 0.5 | BN | 6387 | Transmission High Side Driver 1 Signal Driver | I | — |
| 10 | 1.5 | GN/VT | 8640 | Battery Positive Voltage | I | — |
| 11 | 0.5 | WH | 6388 | Transmission High Side Driver 2 Signal | I | — |
| 12 | 0.5 | BU | 4171 | Transmission Position Sensor A 9V Reference | I | — |
| 13 | 0.5 | GN | 4170 | Transmission Position Sensor B 9V Reference | I | — |

# T12 Automatic Transmission Assembly X3 (MQB)



4757999

## Connector Part Information

Harness Type: Transmission Case
OEM Connector: 2203990-2
Service Connector: Service by Harness - See Part Catalog
Description: 13-Way F 1.2 MCON Series (BN)

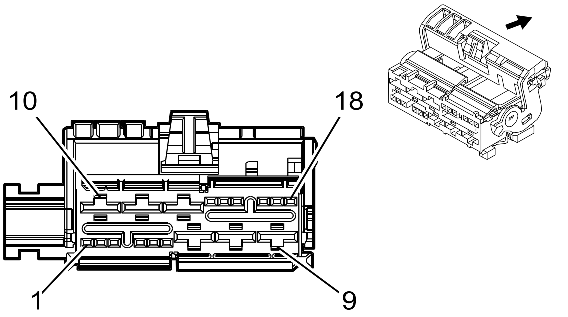
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## T12 Automatic Transmission Assembly X3 (MQB)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/WH | 4509 | Transmission Clutch F Control | I | — |
| 2 | 0.5 | YE/VT | 4507 | Transmission Clutch H Control | I | — |
| 3 | 0.5 | BU/GY | 4508 | Transmission Clutch G Control | I | — |
| 4 | 0.5 | GN/OG | 1530 | Transmission Mainline Pressure Solenoid Control | I | — |
| 5 | 0.5 | GY/BN | 422 | Torque Converter Clutch Solenoid Control | I | — |
| 6 | 0.5 | BU/BN | 586 | Transmission Oil Temperature Sensor Low Reference | I | — |
| 7 | 0.5 | BU/GN | 6404 | Clutch E Control | I | — |
| 8 | 0.5 | GN/BN | 6403 | Clutch D Control | I | — |
| 9 | 0.5 | GY | 6402 | Clutch C Control | I | — |
| 10 | 1.5 | BK/YE | 4450 | Ground | I | — |
| 11 | 0.5 | GY/OG | 2968 | Transmission Auxiliary Oil Pump Control | I | — |
| 12 | 0.5 | VT | 7819 | Default Disable Solenoid Control | I | — |
| 13 | 0.5 | BK/GY | 3927 | IMS Mode Switch Low Reference | I | — |

# T19 Power Supply Transformer (KL9)



3825662

## Connector Part Information

Harness Type: Body
OEM Connector: 15534193
Service Connector: 19330678
Description: 18-Way F 0.64 MTS, 6.3 MCP Series (BK)

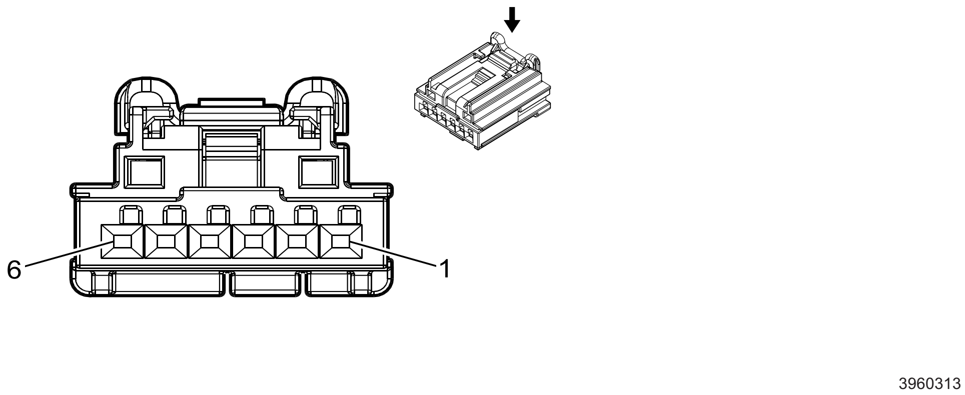
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13327122 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 13327123 | J-35616-64B (LT BU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 13579915 | J-35616-40 (BU) | J-38125-556 | 1241408-1 | Lear 28 | A | B |

## T19 Power Supply Transformer (KL9)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.35 | VT/YE | 5985 | Accessory Wakeup Serial Data | II | — |
| 5 | 0.5 | YE/BK | 625 | Starter Enable Relay Control | I | — |
| 6 | 0.5 | VT/GN | 1739 | Run/Crank Ignition 1 Voltage | I | — |
| 7 | 2.5 | BK | 1250 | Ground | III | — |
| 8 | 2.5 | RD/YE | 8140 | Battery Positive Voltage | III | — |
| 9 | 2.5 | RD/GN | 2173 | 12V Regulated Supply Voltage 2 | III | — |
| 10 | 2.5 | RD/YE | 2172 | 12V Regulated Supply Voltage 1 | III | — |
| 11 | 2.5 | RD/WH | 8040 | Battery Positive Voltage | III | — |
| 12 | 2.5 | BK | 1150 | Ground | III | — |
| 13 | 0.5 | WH | 7494 | High Speed GMLAN Serial Data (-)3 | I | — |
| 14 | 0.5 | WH | 7494 | High Speed GMLAN Serial Data (-)3 | I | — |
| 15 | 0.5 | BU/BK | 7493 | High Speed GMLAN Serial Data (+)3 | I | — |
| 16 | 0.5 | BU/BK | 7493 | High Speed GMLAN Serial Data (+)3 | I | — |
| 17 | 0.5 | WH | 7494 | High Speed GMLAN Serial Data (-)3 | I | — |
| 18 | 0.5 | BU/BK | 7493 | High Speed GMLAN Serial Data (+)3 | I | — |

## T22 Mobile Device Wireless Charger Module (K4C)



### Connector Part Information

Harness Type: Floor Console
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series (BK)

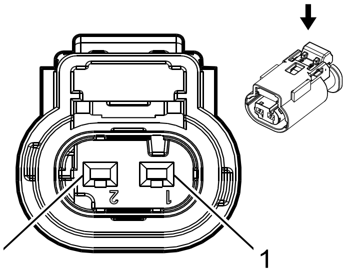
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### T22 Mobile Device Wireless Charger Module (K4C)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | VT | 4601 | Retained Accessory Power Fused Control | I | — |
| 2 | 0.5 | BK | 1150 | Ground | I | — |
| 3 | 0.35 | GN | 4512 | Wireless Charging System Charge Indicator Control | I | — |
| 4 | 0.35 | BN | 4511 | Wireless Charging System Fault Indicator Control | I | — |
| 5 - 6 | — | — | — | Not Occupied | — | — |

# TBD1 Engine Coolant Temperature 7 (LM2)



2717066

### Connector Part Information

Harness Type: Engine
OEM Connector: 13735326
Service Connector: 13587326
Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

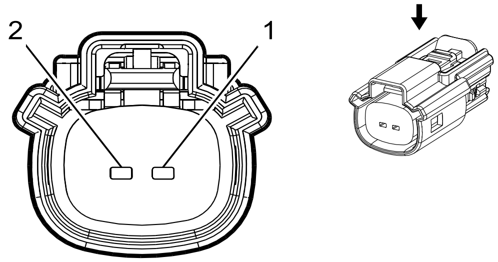
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## TBD1 Engine Coolant Temperature 7 (LM2)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/YE | 626 | Engine Control Sensors Low Reference (3) | I | — |
| 2 | 0.5 | BU/BK | 1422 | Engine Water Charge Air Coolant Temperature Signal | I | — |

# TBD9 Pickup Box Endgate Latch (QK1+QT5)



2474713

## Connector Part Information

Harness Type: Endgate
OEM Connector: 13782480
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 150 MX Series, Sealed (BK)

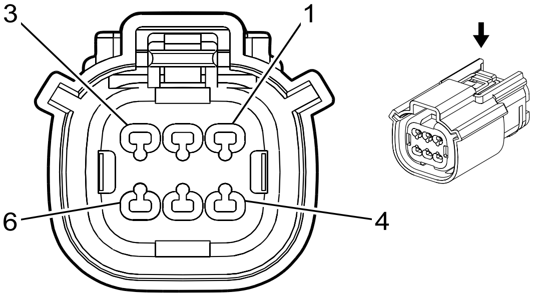
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## TBD9 Pickup Box Endgate Latch (QK1+QT5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | GN | 1299 | Major Endgate Motor Supply Voltage | I | — |
| 2 | 0.5 | YE/BK | 7730 | Major Endgate Motor Return | I | — |

# X80C Accessory Power Receptacle - Cargo (KC9/KCA)



1986157

## Connector Part Information

Harness Type: Cargo Accessory Power Receptacle Jumper
OEM Connector: 15533832
Service Connector: 19333336
Description: 6-Way F 150 MX Series, Sealed (BK)

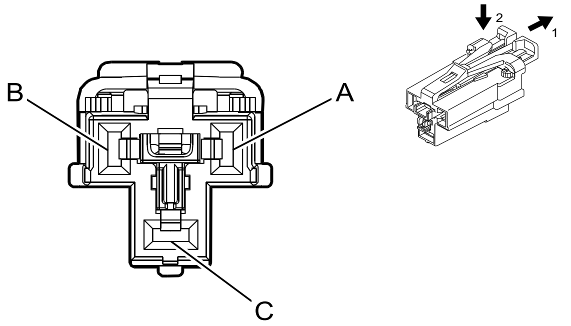
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X80C Accessory Power Receptacle - Cargo (KC9/KCA)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 7754 | AC Power Outlet Enable | I | — |
| 2 | 0.75 | GN/BN | 2266 | DC To AC Inverter Control 2 | I | — |
| 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.75 | BK/WH | 2264 | 120 VAC Phase A 2 | I | — |
| 5 | 1 | BK | 6650 | Ground (66) Propulsion System | I | — |
| 6 | 0.75 | RD/WH | 2265 | 120 VAC Phase B 2 | I | — |

# X80G Accessory Power Receptacle - Instrument Panel



4872413

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33386302
Service Connector: 19369281
Description: 3-Way F 2.8 APEX Series (GY)

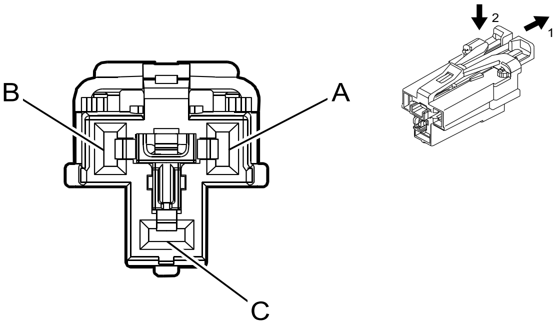
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X80G Accessory Power Receptacle - Instrument Panel

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 1.5 | RD/BN | 4240 | Battery Positive Voltage | I | — |
| B | — | — | — | Not Occupied | — | — |
| C | 1.5 | BK | 1050 | Ground | I | — |

# X80L Accessory Power Receptacle - Center Console Rear (A50/D07)



4872413

## Connector Part Information

Harness Type: Floor Console
OEM Connector: 33386302
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 2.8 APEX Series (GY)

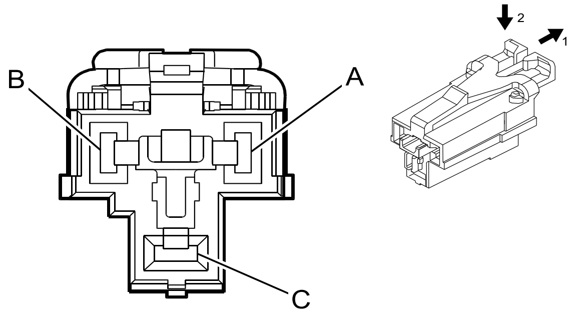
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X80L Accessory Power Receptacle - Center Console Rear (A50/D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 1.5 | RD/WH | 1040 | Battery Positive Voltage | I | — |
| B | — | — | — | Not Occupied | — | — |
| C | 1.5 | BK | 1150 | Ground | I | — |

## X80M Accessory Power Receptacle - Rear Seat (KPA+(AE7/AZ3))



4997561

### Connector Part Information

Harness Type: Front Middle Seat
OEM Connector: 33266036
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 2.8 APEX Series (GY)

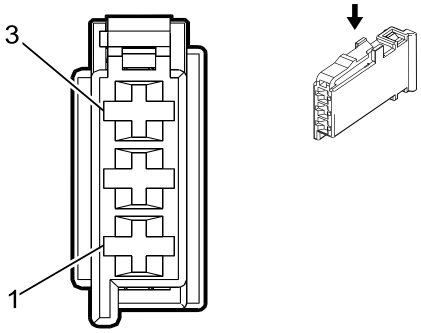
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### X80M Accessory Power Receptacle - Rear Seat (KPA+(AE7/AZ3))

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 1.5 | RD/WH | 1040 | Battery Positive Voltage | I | — |
| B | — | — | — | Not Occupied | — | — |
| C | 1.5 | BK | 1150 | Ground | I | — |

# X81 Accessory Power Receptacle - 110V AC X1 (KI4)



2039656

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10865339
Service Connector: 93186706
Description: 3-Way F 1.6 Micro-Timer Series (BK)

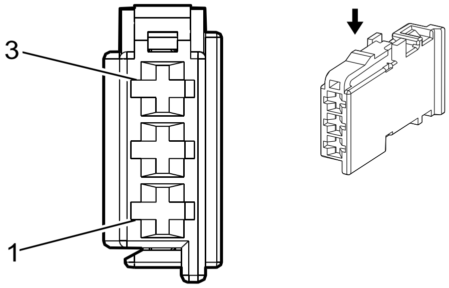
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X81 Accessory Power Receptacle - 110V AC X1 (KI4)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BN | 7754 | AC Power Outlet Enable | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | BK | 5683 | 120 V AC Phase A | I | — |

# X81 Accessory Power Receptacle - 110V AC X2 (KI4)



2236412

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13648774
Service Connector: 19367740
Description: 3-Way F 1.6 Timer Series, Sealed (GY)

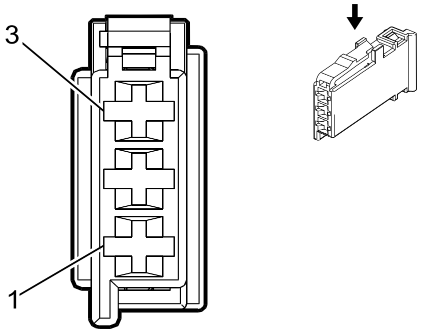
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X81 Accessory Power Receptacle - 110V AC X2 (KI4)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU/BN | 6807 | DC To AC Inverter Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | RD | 5684 | 120 V AC Phase B | I | — |

# X81B Accessory Power Receptacle - 220V AC X1 (KI5)



2039656

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10865339
Service Connector: 93186706
Description: 3-Way F 1.6 Micro-Timer Series (BK)

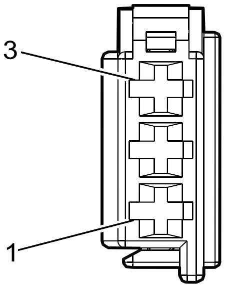
## Terminal Part Information

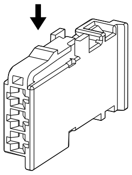
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X81B Accessory Power Receptacle - 220V AC X1 (KI5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BN | 7754 | AC Power Outlet Enable | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | BK | 5683 | 120 V AC Phase A | I | — |

# X81B Accessory Power Receptacle - 220V AC X2 (KI5)





2236412

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13648774
Service Connector: 19367740
Description: 3-Way F 1.6 Timer Series, Sealed (GY)

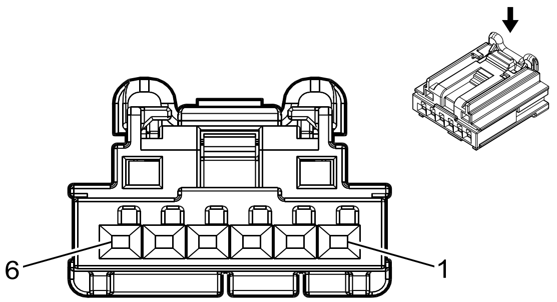
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-14 (GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X81B Accessory Power Receptacle - 220V AC X2 (KI5)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | BU/BN | 6807 | DC To AC Inverter Control | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.75 | RD | 5684 | 120 V AC Phase B | I | — |

# X83 Auxiliary Audio Input X1 ((IOS/IOT)+D07)



3960313

## Connector Part Information

Harness Type: Floor Console
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series (BK)

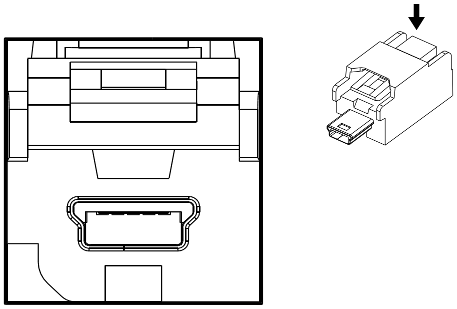
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X83 Auxiliary Audio Input X1 ((IOS/IOT)+D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD/WH | 1340 | Battery Positive Voltage | I | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 3 | 0.35 | BK | 1250 | Ground | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |

# X83 Auxiliary Audio Input X2 ((IOS/IOT)+D07)



3214018

## Connector Part Information

Harness Type: Floor Console USB
OEM Connector: 13584747
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type (GY)

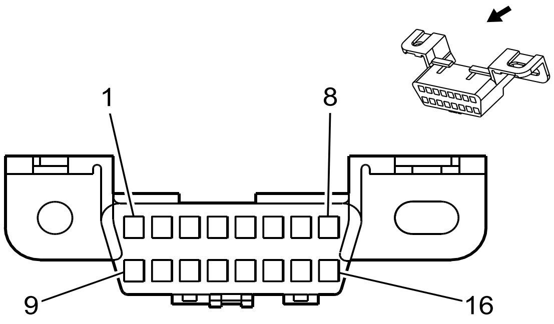
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X83 Auxiliary Audio Input X2 ((IOS/IOT)+D07)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | USB | — | USB Serial Data | I | — |

# X84 Data Link Connector



68793

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 12110250
Service Connector: 12110250
Description: 16-Way F 150 Metri-Pack Series (BK)

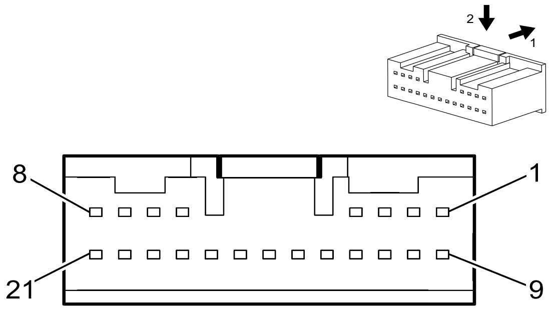
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13580059 | J-35616-14 (GN) | J-38125-12A | 12129484 | Delphi 19 | E | C |

## X84 Data Link Connector

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | GN/WH | 2100 | Low Speed GMLAN Serial Data #3 | I | — |
| 2 | — | — | — | Not Occupied | — | — |
| 3 | 0.35 | BU/WH | 2089 | High Speed GMLAN Serial Data (+)(13) | I | — |
| 4 | 0.35 | BK | 1850 | Ground | I | — |
| 5 | 0.5 | BK/WH | 1851 | Signal Ground | I | — |
| 6 | 0.35 | BU/BK | 1978 | High Speed GMLAN Serial Data (+)(11) | I | — |
| 7 - 10 | — | — | — | Not Occupied | — | — |
| 11 | 0.35 | WH | 2090 | High Speed GMLAN Serial Data (-)(13) | I | — |
| 12 | 0.35 | BU/BN | 1980 | High Speed GMLAN Serial Data (+)(12) | I | — |
| 13 | 0.35 | WH | 1981 | High Speed GMLAN Serial Data (-)(12) | I | — |
| 14 | 0.35 | WH | 1979 | High Speed GMLAN Serial Data (-)(11) | I | — |
| 15 | — | — | — | Not Occupied | — | — |
| 16 | 0.5 | RD/WH | 640 | Battery Positive Voltage | I | — |

# X85 Steering Wheel Air Bag Coil X1



3960237

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 33291416
Service Connector: 13510218
Description: 21-Way F 0.64 Series, Sealed (YE)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575742 | J-35616-64B (LT BU) | J-38125-215A | SAIT-A03T-M064 | Yazaki 14 | P | P |
| II | 13575864 | J-35616-64B (LT BU) | J-38125-215A | SAIT-A03GF-M064 | Yazaki 27 | P | P |
| III | 13575867 | J-35616-64B (LT BU) | J-38125-215A | SAIT-A03T-M064 | Yazaki 14 | P | P |

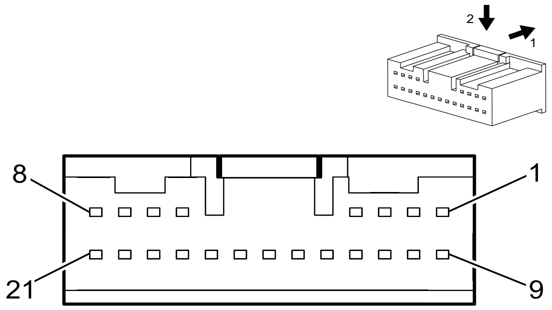
## X85 Steering Wheel Air Bag Coil X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.5 | BK/WH | 1851 | Signal Ground | I | — |
| 2 | 0.35 | GN/WH | 3287 | Horn Switch Signal | III | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | 0.35 | OG/GN | 3023 | Steering Wheel Module Stage 2 High Control | II | — |
| 6 | 0.35 | WH/OG | 3022 | Steering Wheel Module Stage 2 Low Control | II | — |
| 7 | 0.35 | BN/OG | 3020 | Steering Wheel Module Stage 1 Low Control | II | — |
| 8 | 0.35 | OG/VT | 3021 | Steering Wheel Module Stage 1 High Control | II | — |
| 9 | 0.35 | GN/BK | 3894 | Local Interconnect Network Serial Data Bus 12 | III | — |
| 10 | 0.35 | GN/BU | 4119 | Local Interconnect Network Serial Data Bus 19 | III | — |
| 11 | 0.35 | BN/GN | 1884 | Cruise Control Set/Coast/Resume/Accelerate Switch Signal | III | — |
| 12 | 0.35 | WH/RD | 1444 | 12V Reference | III | — |
| 13 | — | — | — | Not Occupied | — | — |
| 14 | 0.35 | RD/YE | 3040 | Battery Positive Voltage | III | — |
| 15 | 0.35 | GY/GN | 5737 | Adaptive Cruise Control Gap Up/Down Switch Signal | III | — |
| 16 | — | — | — | Not Occupied | — | — |
| 17 | 0.5 | YE | 6817 | LED Backlight Dimming Control | I | — |

## X85 Steering Wheel Air Bag Coil X1 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 18 - 19 | — | — | — | Not Occupied | — | — |
| 20 | 0.5 | BK | 1850 | Ground | I | — |
| 21 | 0.5 | VT/WH | 1139 | Run/Crank Ignition 1 Voltage | I | — |

# X85 Steering Wheel Air Bag Coil X2



3960237

## Connector Part Information

Harness Type: Steering Wheel
OEM Connector: 13510218
Service Connector: Service by Harness - See Part Catalog
Description: 21-Way F 0.64 Series, Sealed (YE)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

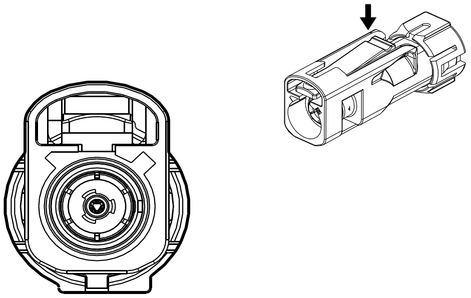
## X85 Steering Wheel Air Bag Coil X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | —<br>— | BK<br>BK | 1850<br>1850 | Ground<br>Ground | I | —<br>— |
| 2 | — | RD | 3287 | Horn Switch Signal | I | — |
| 3 - 4 | — | — | — | Not Occupied | — | — |
| 5 | — | GY/OG | 3023 | Steering Wheel Module Stage 2 High Control | I | — |
| 6 | — | OG/VT | 3022 | Steering Wheel Module Stage 2 Low Control | I | — |
| 7 | — | OG/WH | 3020 | Steering Wheel Module Stage 1 Low Control | I | — |
| 8 | — | YE/OG | 3021 | Steering Wheel Module Stage 1 High Control | I | — |
| 9 | — | OG | 1139 | Run/Crank Ignition 1 Voltage | I | — |
| 10 | — | BK | 1850 | Ground | I | — |
| 11 - 12 | — | — | — | Not Occupied | — | — |
| 13 | — | YE/ | 6817 | LED Backlight Dimming Control | I | — |
| 14 | — | — | — | Not Occupied | — | — |
| 15 | — | VT | 5737 | Adaptive Cruise Control Gap Up/Down Switch Signal | I | — |
| 16 | —<br>— | GN<br>GN | 3040<br>3040 | Battery Positive Voltage<br>Battery Positive Voltage | I | —<br>— |
| 17 | — | — | — | Not Occupied | — | — |
| 18 | — | BU | 1444 | 12V Reference | I | — |
| 19 | — | GN/OG | 1884 | Cruise Control Set/Coast/Resume/Accelerate Switch Signal | I | — |
| 20 | — | WH | 4119 | Local Interconnect Network Serial Data Bus 19 | I | — |

## X85 Steering Wheel Air Bag Coil X2 (cont'd)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 21 | — | BK/BU | 3894 | Local Interconnect Network Serial Data Bus 12 | I | — |
|  | — | BK/BU | 3894 | Local Interconnect Network Serial Data Bus 12 |  | — |

# X88 Trailer Connector X2 (UVI)



4817703

## Connector Part Information

Harness Type: Chassis COAX
OEM Connector: 13514209
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BK)

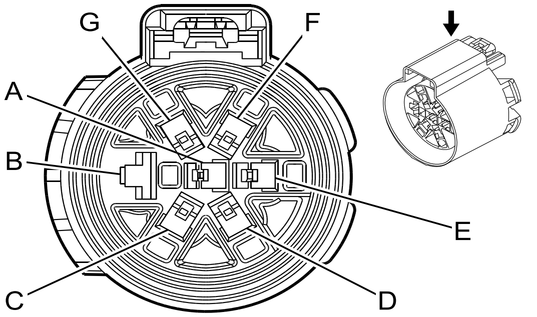
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X88 Trailer Connector X2 (UVI)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | Coax | — | Front Vision Camera #1 Signal | I | — |

## X88 Trailer Connector X1 (Z82-U1D)



2056936

### Connector Part Information

Harness Type: Chassis
OEM Connector: 13857223
Service Connector: 13583927
Description: 7-Way F 280, 630 Metri-Pack Series, Sealed (BK)

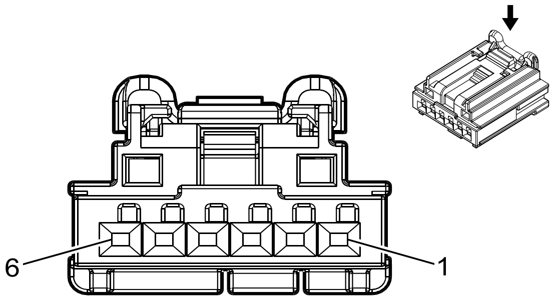
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-42 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### X88 Trailer Connector X1 (Z82-U1D)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| A | 0.75<br>0.75 | GN/WH<br>WH/GN | 5189<br>1624 | Trailer Backup Lamp Control<br>Trailer Backup Lamp Control | II<br>II | U1D<br>-U1D |
| B | 5<br>5 | BK<br>WH | 1750<br>22 | Ground<br>Trailer Ground | I<br>I | U1D<br>-U1D |
| C | 2.5 | BU | 47 | Trailer Auxiliary Control | II | — |
| D | 0.75 | GN/VT | 1619 | Right Rear Trailer Stop/Turn Lamp Control | II | — |
| E | 2<br>4 | RD/BN<br>RD/GN | 7601<br>742 | Trailer Battery Charge Control<br>Battery Positive Voltage | II<br>II | U1D<br>-U1D |
| F | 0.75<br>1.5 | GY/BN<br>GY/BN | 2109<br>2109 | Trailer Park Lamp Control<br>Trailer Park Lamp Control | II<br>II | U1D<br>Z82/-U1D |
| G | 0.75<br>0.75 | YE/GY<br>YE/BU | 1618<br>318 | Left Rear Trailer Stop/Turn Lamp Control<br>Left Rear Trailer Stop/Turn Lamp Control | II<br>II | U1D<br>-U1D |

# X92 USB Receptacle X1



3960313

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 13920633
Service Connector: 19332786
Description: 6-Way F 0.64 Generation Y Series (BK)

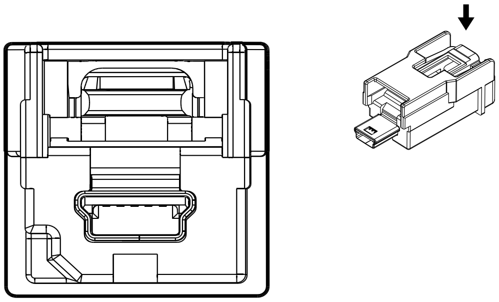
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X92 USB Receptacle X1

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | RD/WH | 1340 | Battery Positive Voltage | I | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 3 | 0.35 | BK/WH | 1851 | Signal Ground | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |

# X92 USB Receptacle X2


2807491

## Connector Part Information

Harness Type: Instrument Panel USB
OEM Connector: 13581313
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 5-Way M 2.0 Mini-B USB Type (GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X92 USB Receptacle X2

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| — | — | USB | — | USB Serial Data | I | — |

# X92 USB Receptacle X3 (D07+(IOS/IOT))

—

## Connector Part Information

Harness Type: USB Receptacle Jumper
OEM Connector: 13584986
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way

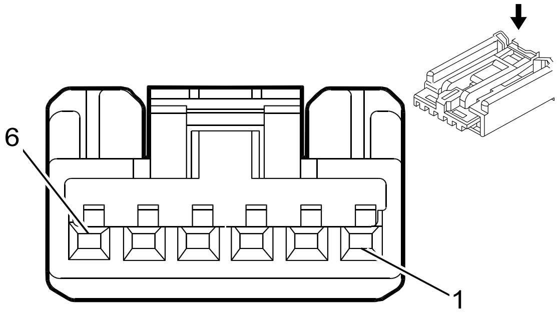
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X92 USB Receptacle X3 (D07+(IOS/IOT))

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| BK | — | — | USB | USB Cable | I | — |

## X92B USB Receptacle - Rear Seat ((AE7/AZ3)+USS)



1862240

### Connector Part Information

Harness Type: Front Middle Seat
OEM Connector: AIT2PB-06-1AK
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Kaizen Series (BK)

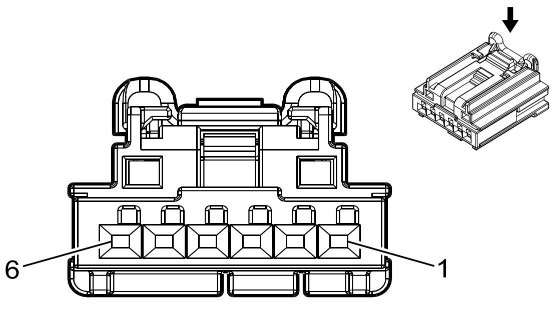
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### X92B USB Receptacle - Rear Seat ((AE7/AZ3)+USS)

| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 - 3 | — | — | — | Not Occupied | — | — |
| 4 | 0.5 | BK | 1150 | Ground | I | — |
| 5 | — | — | — | Not Occupied | — | — |
| 6 | 0.5 | VT/YE | 143 | Accessory Ignition Voltage | I | — |

# X92C USB Receptacle - Center Console Rear ((IOS/IOT)+(A50/D07))



3960313

## Connector Part Information

Harness Type: Floor Console
OEM Connector: 13920633
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 0.64 Generation Y Series (BK)

## Terminal Part Information

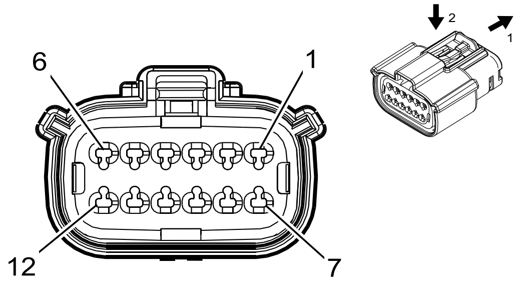
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X92C USB Receptacle - Center Console Rear ((IOS/IOT)+(A50/D07))

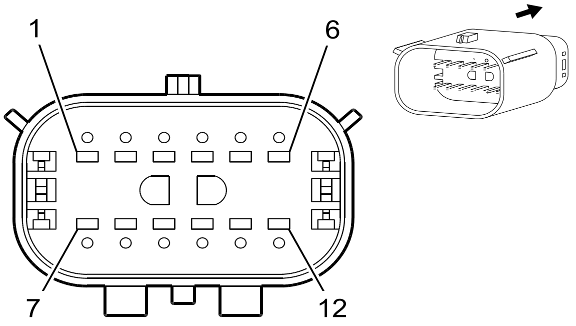
| Pin | Size | Color | Circuit | Function | Terminal Type ID | Option |
|---|---|---|---|---|---|---|
| 1 | 0.35 | VT/YE | 143 | Accessory Ignition Voltage | I | — |
| 2 | 0.35 | YE | 6817 | LED Backlight Dimming Control | I | — |
| 3 | 0.5 | BK | 1150 | Ground | I | — |
| 4 - 6 | — | — | — | Not Occupied | — | — |

# Inline Harness Connector End Views

## X100 Front Fascia Harness to Body Harness (T3U/UD5)



2871860



1825167

### Connector Part Information

Harness Type: Front Fascia
OEM Connector: 33276998
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way F 150 MX Series, Sealed (BK)

### Connector Part Information

Harness Type: Body
OEM Connector: 33369138
Service Connector: 19369242
Description: 12-Way M 150 MX Series, Sealed (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | 19119395 | J-35616-3 (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| III | 19119440 | J-35616-3 (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |

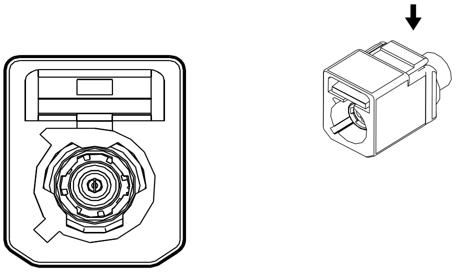
### X100 Front Fascia Harness to Body Harness (T3U/UD5)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 250 | I | — | Ground | 1 | 0.5 | BK | 250 | II | — |
| 2 | 0.5 | VT/GY | 5218 | I | — | Front Parking Right Mid Sensor | 2 | 0.5 | VT/GY | 5218 | II | — |
| 3 | 0.5 | WH/GY | 5217 | I | — | Front Parking Right Corner Sensor | 3 | 0.5 | WH/GY | 5217 | II | — |
| 4 | 0.5 | BK | 150 | I | — | Ground | 4 | 0.75 | BK | 150 | III | — |
| 5 | 0.5 | VT/WH | 5215 | I | — | Front Parking Left Corner Sensor | 5 | 0.5 | VT/WH | 5215 | II | — |
| 6 | 0.5 | BK/BU | 5214 | I | — | Front Parking Sensor Low Reference | 6 | 0.5 | BK/BU | 5214 | II | — |
| 7 | 0.5 | YE/GY | 5216 | I | — | Front Parking Left Mid Sensor | 7 | 0.5 | YE/GY | 5216 | II | — |
| 8 | 0.5 | YE/VT | 5213 | I | — | Front Parking Left/Right/Mid Sensor | 8 | 0.5 | YE/VT | 5213 | II | — |

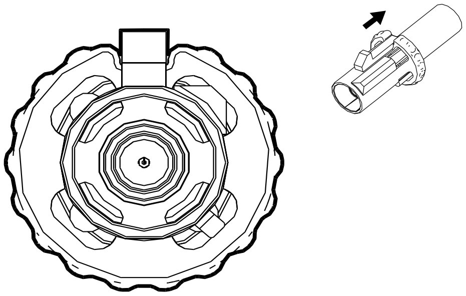
## X100 Front Fascia Harness to Body Harness (T3U/UD5) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 0.5 | BN/VT | 2234 | I | — | Front Fog Lamp Control | 9 | 0.5 | BN/VT | 2234 | II | — |
| 10 - 12 | — | — | — | — | — | Not Occupied | 10 - 12 | — | — | — | — | — |

# X109 Chassis Harness to Body Harness (UVB)



4002773



4380044

### Connector Part Information

Harness Type: Chassis COAX
OEM Connector: 13514208
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BN)

### Connector Part Information

Harness Type: Body COAX
OEM Connector: 13514205
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way M Coax Type (BN)

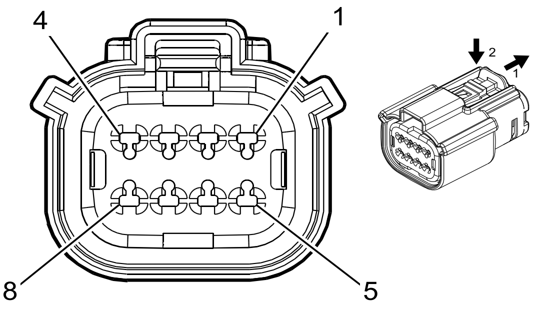
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X109 Chassis Harness to Body Harness (UVB)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax | — | I | — | Coaxial Camera Signal | — | — | Coax | — | I | — |

# X110 Body Harness to Left Headlamp Harness



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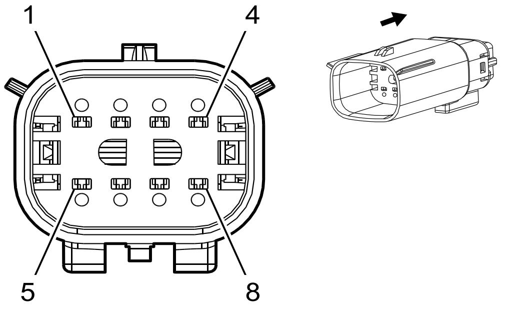


2667653

## Connector Part Information

Harness Type: Body
OEM Connector: 35037827
Service Connector: 19368638
Description: 8-Way F 150 MX Series, Sealed (BK)

## Connector Part Information

Harness Type: Left Headlamp
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M

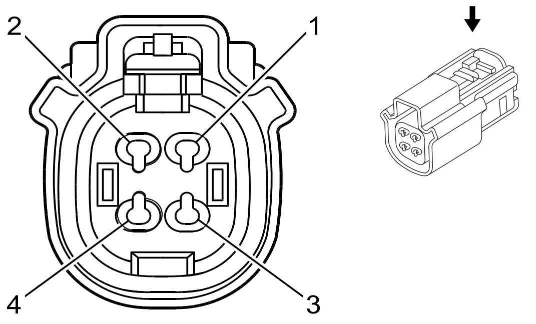
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

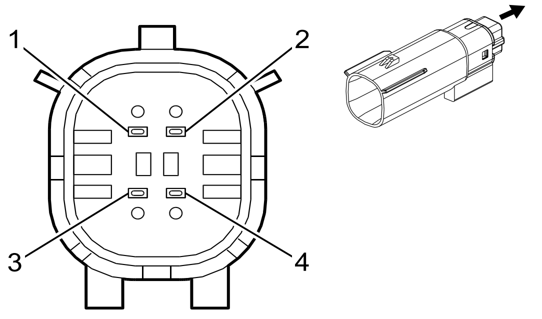
## X110 Body Harness to Left Headlamp Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 150 | I | — | Ground | 1 | 0.75 | BK | 150 | II | — |
| 2 | 0.75 | YE | 2227 | I | -GF2-GF5-GPZ | Left Headlamp Control | 2 | 0.75 | BK | 2227 | II | -GF2-GF5-GPZ |
| 3 | 0.75 | YE | 712 | I | — | Left Headlamp Low Beam Control | 3 | 0.75 | BK | 712 | II | — |
| 4 | 0.75 | WH | 711 | I | — | Left Headlamp High Beam Control | 4 | 0.75 | BK | 711 | II | — |
| 5 | 0.5 | VT/GY | 709 | I | — | Left Park Lamp Control | 5 | 0.5 | BK | 709 | II | — |
| 6 | 0.35 | BU/VT | 3204 | I | -GF2-GF5-GPZ | Left Headlamp Bulb Outage Signal | 6 | 0.35 | BK | 3204 | II | -GF2-GF5-GPZ |
| 7 | 0.5 | BU/WH | 1314 | I | — | Left Front Turn Signal Lamp Control | 7 | 0.5 | BK | 1314 | II | — |
| 8 | 0.35 | GY/BU | 7538 | I | -GF2-GF5-GPZ | Left Front DRL Control | 8 | 0.35 | BK | 7538 | II | -GF2-GF5-GPZ |

# X111 Transfer Case Harness to Engine Harness ((NP0/NQH)+LM2)



1960031



2368875

## Connector Part Information

Harness Type: Transfer Case
OEM Connector: 33346391
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 MX Series, Sealed (BK)

## Connector Part Information

Harness Type: Engine
OEM Connector: 33344515
Service Connector: 19330396
Description: 4-Way M 150 MX Series, Sealed (BK)

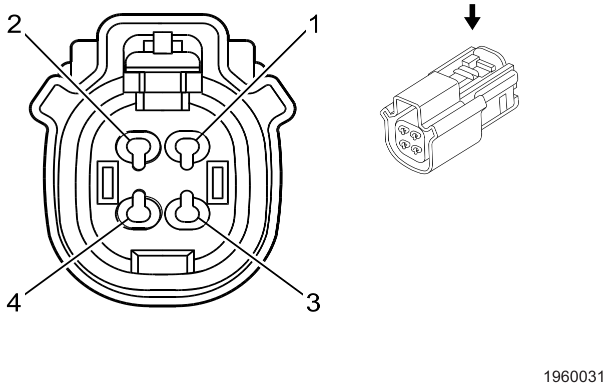
## Terminal Part Information

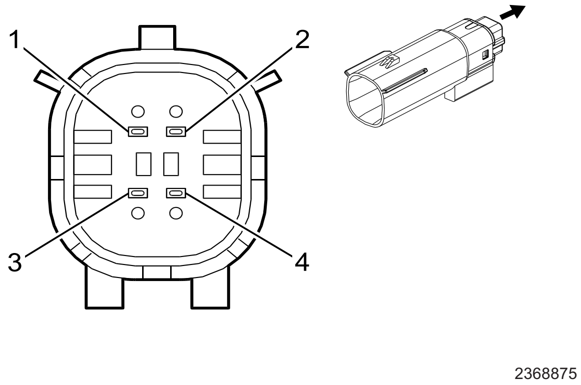
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X111 Transfer Case Harness to Engine Harness ((NP0/NQH)+LM2)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 4450 | I | — | Ground | 1 | 0.5 | BK | 4450 | II | — |
| 2 | 0.5 | YE/WH | 1695 | I | — | Four Wheel Drive Wheel Lock Indicator Control | 2 | 0.5 | YE/WH | 1695 | II | — |
| 3 | 0.5 | VT/BK | 2139 | I | — | Run/Crank Ignition 1 Voltage | 3 | 0.5 | VT/BK | 2139 | II | — |
| 4 | 0.5 | GY/BK | 1570 | I | — | Front Axle Actuator Control | 4 | 0.5 | GY/BK | 1570 | II | — |

# X111 Transfer Case Harness to Engine Harness ((NP0/NQH)-LM2)





## Connector Part Information

Harness Type: Transfer Case
OEM Connector: 33346391
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way F 150 MX Series, Sealed (BK)

## Connector Part Information

Harness Type: Engine
OEM Connector: 33344515
Service Connector: 19330396
Description: 4-Way M 150 MX Series, Sealed (BK)

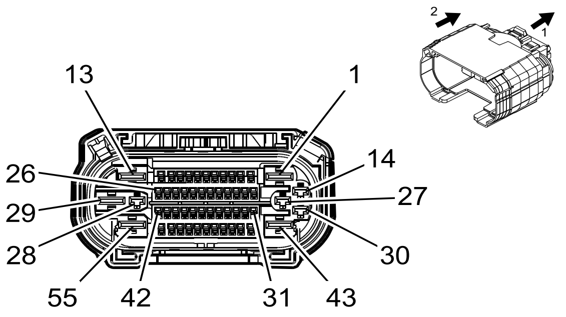
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X111 Transfer Case Harness to Engine Harness ((NP0/NQH)-LM2)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | BK | 4450 | I | — | Ground<br>Ground | 1 | 1<br>0.5 | BK<br>BK | 4450<br>4450 | II<br>II | L82<br>LV3/L3B |
| 2 | 0.5 | YE/WH | 1695 | I | — | Four Wheel Drive Wheel Lock Indicator Control | 2 | 0.5 | YE/WH | 1695 | II | — |
| 3 | 0.5 | VT/BK | 2139 | I | — | Run/Crank Ignition 1 Voltage | 3 | 0.5 | VT/BK | 2139 | II | — |
| 4 | 0.5 | GY/BK | 1570 | I | — | Front Axle Actuator Control | 4 | 0.5 | GY/BK | 1570 | II | — |

# X115 Engine Harness to Body Harness



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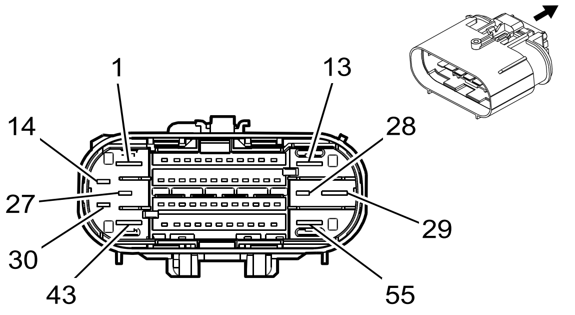


4994369

## Connector Part Information

Harness Type: Engine

OEM Connector: 33357990

Service Connector: 19371184

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed (GY)

## Connector Part Information

Harness Type: Body

OEM Connector: 33357992

Service Connector: 19371182

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed (GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300649 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19332900 | J-35616-42 (RD) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19370818 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | 19371217 | J-25616-64B (LT BU) | J-38125-12A | Not Available | Not Available | Not Available | Not Available |
| V | 19371217 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VI | 19352074 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VII | 19352075 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VIII | 84616650 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IX | Not Required | J-35616-43 (RD) | No Tool Required | Not Available | Not Available | Not Available | Not Available |

## X115 Engine Harness to Body Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | 1 | BK | 9003 | III | — | Not Used | 2 | 1 | BK | 9003 | VII | — |
| 3 | 0.5 | BK/ BU | 1271 | IV | — | Accelerator Pedal Position Low Reference 1 | 3 | 0.35 | BK/ BU | 1271 | VIII | — |

## X115 Engine Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4 | 0.5 | BN/ WH | 419 | I | — | Check Engine Indicator Control | 4 | 0.35 | BN/ WH | 419 | VI | — |
| 5 | 0.5 | GN/ WH | 1162 | IV | — | Accelerator Pedal Position Signal 2 | 5 | 0.35 | GN/ WH | 1162 | VIII | — |
| 6 | 0.5 | GN/ BN | 507 | I | — | Wait To Start Indicator Control | 6 | 0.35 | GN/ BN | 507 | VI | — |
| 7 - 11 | — | — | — | — | — | Not Occupied | 7 - 11 | — | — | — | — | — |
| 12 | 1 | BK | 9003 | III | — | Not Used | 12 | 1 | BK | 9003 | VII | — |
| 13 - 14 | — | — | — | — | — | Not Occupied | 13 - 14 | — | — | — | — | — |
| 15 | 0.5 | YE | 4063 | I | — | Hood Status A Signal | 15 | 0.35 | YE | 4063 | VI | — |
| 16 | 0.5 | VT/ GN | 439 | I | — | Run/Crank Ignition 1 Voltage | 16 | 0.5 | VT/ GN | 439 | VI | — |
| 17 | 0.5 | WH/ BU | 5986 | I | — | Serial Data Communication Enable | 17 | 0.35 | WH/ BU | 5986 | VI | — |
| 18 | 0.5 | BK/ GY | 626 | I | — | Engine Control Sensors Low Reference (3) | 18 | 0.35 | BK/ GY | 2204 | VI | — |
| 19 | 0.5<br>0.5 | WH/ VT<br>WH/ BN | 4108<br>2203 | I<br>I | L3B<br>-L3B | Enhanced Driver Mode 2 Switch Signal<br>Enhanced Driver Mode 2 Switch Signal | 19 | | | | | |
| 20 | 0.5 | BU/ RD | 460 | I | URC | Engine Control Sensors 5 Volt Reference (1) | 20 | 0.35 | GY | 4109 | VI | URC |
| 21 | — | — | — | — | — | Not Occupied | 21 | — | — | — | — | — |
| 22 | 0.5 | VT/ YE | 5985 | I | — | Accessory Wakeup Serial Data | 22 | 0.35 | VT/ YE | 5985 | VI | — |
| 23 | 0.5 | GN/ VT | 4621 | I | — | Local Interconnect Network Serial Data Bus 21 | 23 | 0.5 | GN/ VT | 4621 | VI | — |
| 24 | 0.5 | BU/ BK | 7493 | I | — | High Speed GMLAN Serial Data (+)3 | 24 | 0.5 | BU/ BK | 7493 | VI | — |
| 25 | 0.5 | WH | 7494 | I | — | High Speed GMLAN Serial Data (-)3 | 25 | 0.5 | WH | 7494 | VI | — |
| 26 | 0.5 | BU/ GY | 636 | I | — | Outside Ambient Air Temperature Sensor Signal | 26 | 0.35 | BU/ GY | 636 | VI | — |

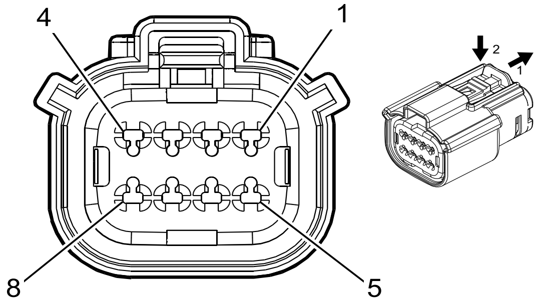
## X115 Engine Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 27 - 30 | — | — | — | — | — | Not Occupied | 27 - 30 | — | — | — | — | — |
| 31 | 0.5 | WH/BU | 6311 | I | — | Cruise/ETC/TCC Brake Signal | 31 | 0.35 | WH/BU | 6311 | VI | — |
| 32 | 0.5 | VT/BU | 6091 | I | — | Crankshaft Position Sensor Replicated Signal | 32 | 0.35 | VT/BU | 6091 | VI | — |
| 33 | 0.5 | BN | 1560 | I | — | Neutral Indicator Control | 33 | 0.35 | BN | 1560 | VI | — |
| 34 | 0.35 | VT/YE | 43 | I | — | Accessory Ignition Voltage | 34 | 0.35 | VT/YE | 43 | VI | — |
| 35 | 0.5 | BK/GY | 626 | I | — | Engine Control Sensors Low Reference (3) | 35 | 0.35 | BK/YE | 5382 | VI | — |
| 36 | 0.5 | WH/GN | 5380 | I | — | Brake Position Sensor Signal | 36 | 0.35 | WH/GN | 5380 | VI | — |
| 37 | 0.5 | WH/RD | 480 | I | — | Engine Control Sensors 5 Volt Reference (2) | 37 | 0.35 | WH/RD | 5381 | VI | — |
| 38 | 0.5 | BU | 2500 | I | — | High Speed GMLAN Serial Data (+) 1 | 38 | 0.5 | BU | 2500 | VI | — |
| 39 | 0.5 | WH | 2501 | I | — | High Speed GMLAN Serial Data (-) 1 | 39 | 0.5 | WH | 2501 | VI | — |
| 40 | 0.5 | BK/VT | 1272 | IV | — | Accelerator Pedal Position Low Reference 2 | 40 | 0.35 | BK/VT | 1272 | VIII | — |
| 41 | — | — | — | — | — | Not Occupied | 41 | — | — | — | — | — |
| 42 | 0.5 | YE/BK | 625 | I | — | Starter Enable Relay Control | 42 | 0.5 | YE/BK | 625 | VI | — |
| 43 | 6 | BK/WH | 451 | II | — | Signal Ground | 43 | 6 | BK/WH | 2251 | IX | — |
| 44 | 1.5 | RD/GN | 1840 | V | — | Battery Positive Voltage | 44 | 1 | RD/GN | 1840 | VII | — |
| 45 | — | — | — | — | — | Not Occupied | 45 | — | — | — | — | — |
| 46 | 0.5 | BK/GN | 580 | I | — | Engine Control Sensors Low Reference (2) | 46 | 0.35 | BK/GN | 580 | VI | — |
| 47 | 0.5 | BU/BN | 7573 | I | — | Electric Variable Displacement Supply | 47 | 0.35 | BU/BN | 7573 | VI | — |
| 48 | 0.5 | RD/GN | 40 | I | — | Battery Positive Voltage | 48 | 0.35 | RD/GN | 40 | VI | — |

## X115 Engine Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 49 | 0.5 | YE/ WH | 1161 | IV | — | Accelerator Pedal Position Signal 1 | 49 | 0.35 | YE/ WH | 1161 | VIII | — |
| 50 | 0.5 | WH/ RD | 1164 | IV | — | Accelerator Pedal Position 5V Reference 1 | 50 | 0.35 | WH/ RD | 1164 | VIII | — |
| 51 | 0.5 | BN/ RD | 1274 | IV | — | Accelerator Pedal Position 5V Reference 2 | 51 | 0.35 | BN/ RD | 1274 | VIII | — |
| 52 | — | — | — | — | — | Not Occupied | 52 | — | — | — | — | — |
| 53 | 0.5 | BU/ YE | 7574 | I | — | Electric Variable Displacement Control | 53 | 0.35 | BU/ YE | 7574 | VI | — |
| 54 | 1 | BK | 9003 | III | — | Not Used | 54 | 1 | BK | 9003 | VII | — |
| 55 | — | — | — | — | — | Not Occupied | 55 | — | — | — | — | — |

## X120 Body Harness to Right Headlamp Harness



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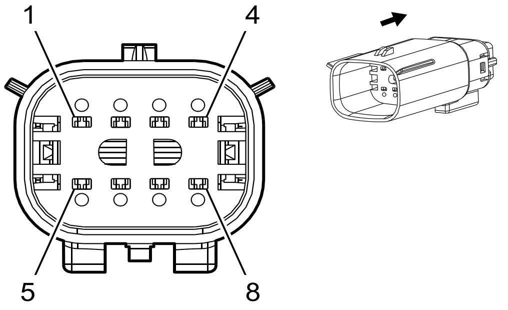


2667653

### Connector Part Information

Harness Type: Body
OEM Connector: 35037827
Service Connector: 19366859
Description: 8-Way F 150 MX Series, Sealed (BK)

### Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M

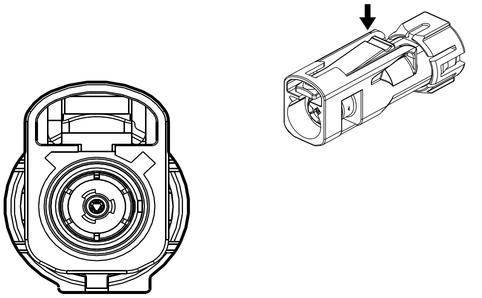
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

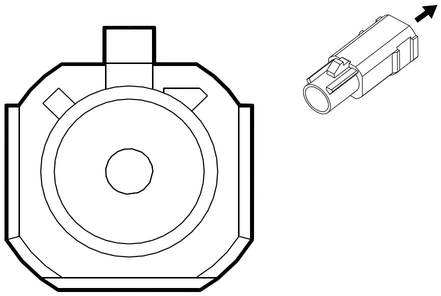
### X120 Body Harness to Right Headlamp Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 250 | I | — | Ground | 1 | 0.75 | BK | 250 | II | — |
| 2 | 0.75 | YE/GY | 2226 | I | -GF2-GF5-GPZ | Right Headlamp Control | 2 | 0.75 | BK | 2226 | II | -GF2-GF5-GPZ |
| 3 | 1 | YE | 312 | I | — | Right Headlamp Low Beam Control | 3 | 1 | BK | 312 | II | — |
| 4 | 0.75 | WH | 311 | I | — | Right Headlamp High Beam Control | 4 | 0.75 | BK | 311 | II | — |
| 5 | 0.5 | GY/BN | 309 | I | — | Right Park Lamp Control | 5 | 0.5 | BK | 309 | II | — |
| 6 | 0.35 | WH/BU | 3203 | I | -GF2-GF5-GPZ | Right Headlamp Bulb Outage Signal | 6 | 0.35 | BK | 3203 | II | -GF2-GF5-GPZ |
| 7 | 0.5 | GN/VT | 1315 | I | — | Right Front Turn Signal Lamp Control | 7 | 0.5 | BK | 1315 | II | — |
| 8 | 0.35 | BU/BN | 7539 | I | -GF2-GF5-GPZ | Right Front DRL Control | 8 | 0.35 | BK | 7539 | II | -GF2-GF5-GPZ |

# X127 Grille Frontview Camera Harness to Body Harness (UV2)



4817703



3681549

## Connector Part Information

Harness Type: Grille Frontview Camera COAX

OEM Connector: 13514209

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type (BK)

## Connector Part Information

Harness Type: Body COAX

OEM Connector: 13514206

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type

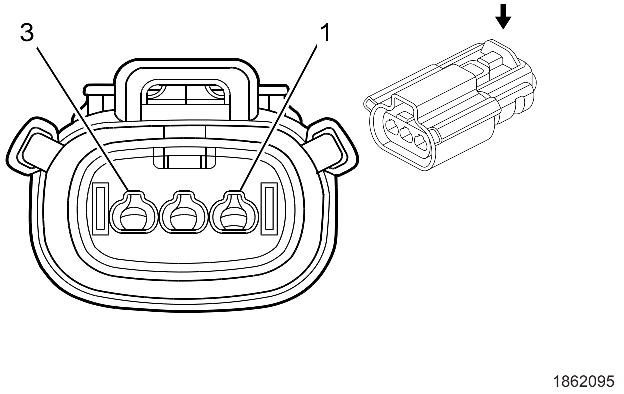
## Terminal Part Information

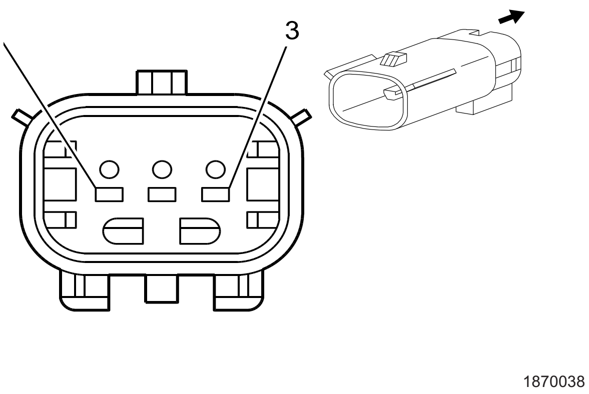
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X127 Grille Frontview Camera Harness to Body Harness (UV2)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax | — | I | — | Front Vision Camera #1 Signal | — | — | Coax | — | I | — |

# X132 Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)





## Connector Part Information

Harness Type: Engine
OEM Connector: 13541759
Service Connector: 19301648
Description: 3-Way F 150 MX Series, Sealed (BK)

## Connector Part Information

Harness Type: Active Grille Air Shutter 1 Actuator Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way M

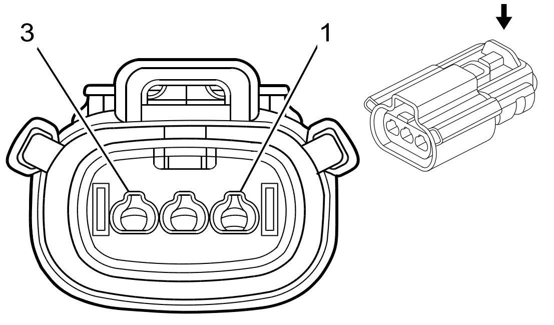
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

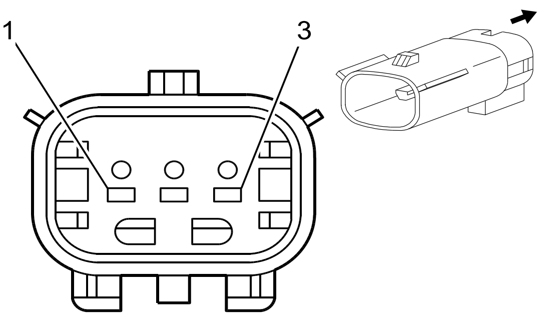
## X132 Engine Harness to Active Grille Air Shutter 1 Actuator Jumper Harness (VTI/WMI)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BU | 5705 | I | — | Powertrain Main Relay Fused Control 6 | 1 | 0.5 | VT/BU | 5705 | II | — |
| 2 | 0.5 | GN/VT | 4621 | I | — | Local Interconnect Network Serial Data Bus 21 | 2 | 0.5 | GN/VT | 4621 | II | — |
| 3 | 1 | BK | 4450 | I | — | Ground | 3 | 1 | BK | 4450 | II | — |

# X133 Active Grille Air Shutter 1 Actuator Jumper Harness to Active Grille Air Shutter 2 Actuator Jumper Harness (WMI)



1862095



1870038

## Connector Part Information

Harness Type: Active Grille Air Shutter 2 Actuator Jumper
OEM Connector: 13503225
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way F 150 MX Series, Sealed (BK)

## Connector Part Information

Harness Type: Active Grille Air Shutter 1 Actuator Jumper
OEM Connector: 13503931
Service Connector: Service by Harness - See Part Catalog
Description: 3-Way M 150 MX Series (BK)

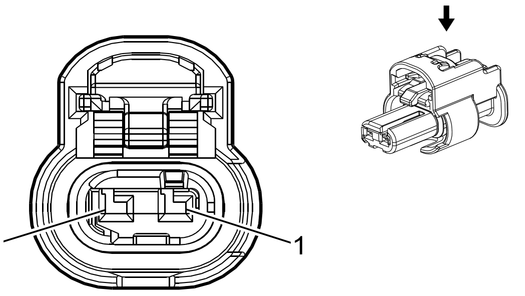
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

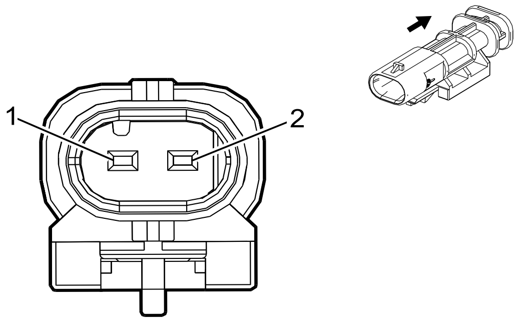
## X133 Active Grille Air Shutter 1 Actuator Jumper Harness to Active Grille Air Shutter 2 Actuator Jumper Harness (WMI)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | — | GN/VT | 4621 | I | — | Local Interconnect Network Serial Data Bus 21 | 2 | — | GN/VT | 4621 | II | — |
| 3 | — | BK | 4450 | I | — | Ground | 3 | — | BK | 4450 | II | — |

# X136 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)



4649903



2474755

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33327048
Service Connector: 19366858
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

## Connector Part Information

Harness Type: Electronic Suspension Strut Extension
OEM Connector: 2203314-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 Multilock Series, Sealed (BK)

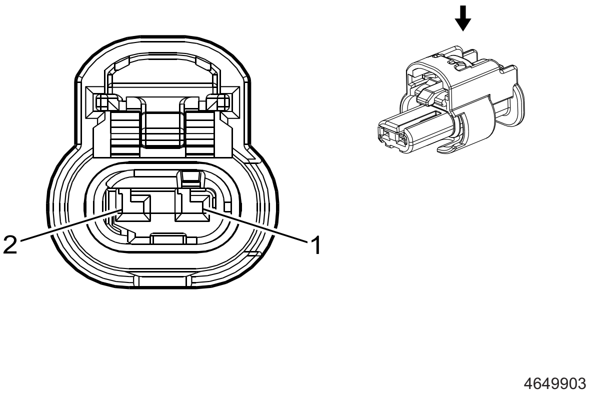
## Terminal Part Information

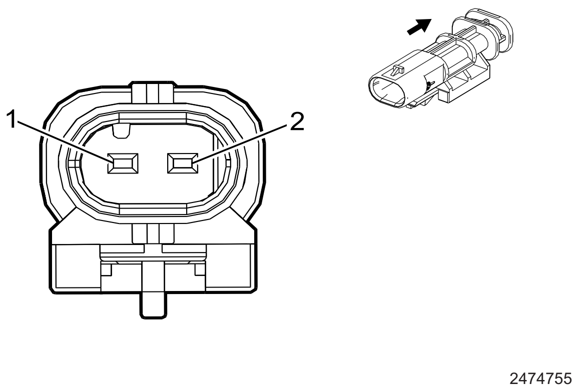
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X136 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BN/WH | 1107 | I | — | Left Front Damping Servo Control | 1 | 0.75 | BU/WH | 1107 | II | — |
| 2 | 0.75 | GY/BU | 1113 | I | — | Left Front Damping Servo Control | 2 | 0.75 | GY | 1113 | II | — |

# X137 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)





## Connector Part Information

Harness Type: Chassis
OEM Connector: 33327048
Service Connector: 19366858
Description: 2-Way F 1.2 MCON Series, Sealed (BK)

## Connector Part Information

Harness Type: Electronic Suspension Strut Extension
OEM Connector: 2203314-1
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M 1.2 Multilock Series, Sealed (BK)

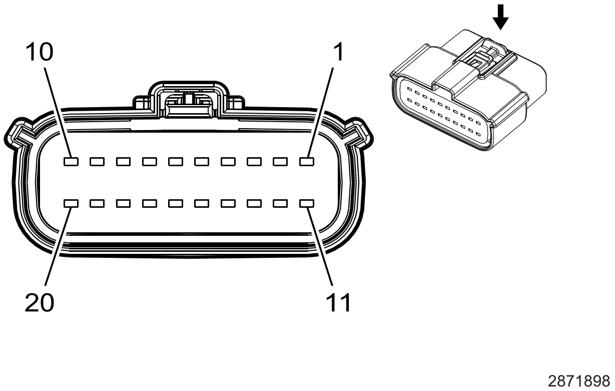
## Terminal Part Information

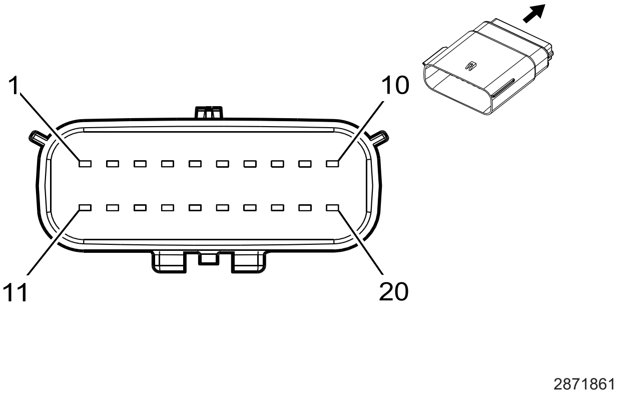
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X137 Chassis Harness to Electronic Suspension Strut Extension Harness (Z45)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BN/ BU | 1116 | I | — | Right Front Damping Servo Control | 1 | 0.75 | BU/ WH | 1116 | II | — |
| 2 | 0.75 | GY/ WH | 1117 | I | — | Right Front Damping Servo Control | 2 | 0.75 | GY | 1117 | II | — |

# X138 Body Harness to Chassis Harness





### Connector Part Information

Harness Type: Body
OEM Connector: 13650143
Service Connector: 19300557
Description: 20-Way F 1.5 Series, Sealed (BK)

### Connector Part Information

Harness Type: Chassis
OEM Connector: 33181044
Service Connector: 19351705
Description: 20-Way M 1.5 Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300432 | J-35616-2A (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| II | 19300635 | J-35616-2A (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| III | 19119395 | J-35616-3 (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| IV | 19119440 | J-35616-3 (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |

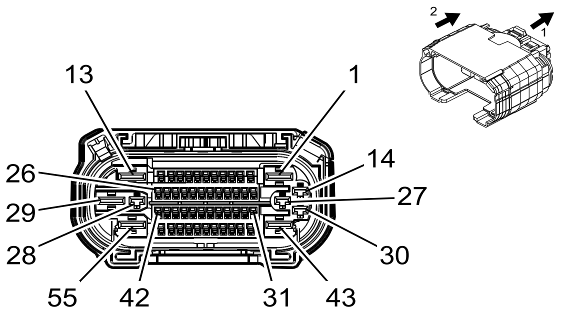
## X138 Body Harness to Chassis Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/GN | 1739 | I | — | Run/Crank Ignition 1 Voltage | 1 | 0.5 | VT/GN | 1739 | IV | — |
| 2 | 0.35 | BN/WH | 7462 | II | — | Running Boards Disable Signal | 2 | 0.5 | BN/WH | 7462 | IV | — |
| 3 | 0.35 | WH/BU | 6973 | II | — | Camera Signal 2 | 3 | 0.5 | WH/BU | 6973 | IV | — |
| 4 | 0.75 | GN/BN | 2266 | I | — | DC To AC Inverter Control 2 | 4 | 0.75 | GN/BN | 2266 | IV | — |
| 5 | 0.5 | VT/WH | 5065 | I | — | Stop Lamp Relay Coil Control | 5 | 0.5 | VT/WH | 5065 | IV | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |
| 7 | 0.5 | BN/GN | 3568 | I | — | Passive Entry Rear Closure Antenna Signal Hi | 7 | 0.5 | BN/GN | 3568 | IV | — |

## X138 Body Harness to Chassis Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0.75 | BK/ WH | 2264 | I | — | 120 VAC Phase A 2 | 8 | 0.75 | BK/ WH | 2264 | IV | — |
| 9 - 10 | — | — | — | — | — | Not Occupied | 9 - 10 | — | — | — | — | — |
| 11 | 0.35 | GN | 5060 | II | — | Low Speed GMLAN Serial Data | 11 | 0.5 | GN | 5060 | IV | — |
| 12 | 0.35 | BK | 6974 | II | UVC | Camera Low Reference | 12 | 0.5 | BU | 6974 | IV | UVC |
| 13 | 0.35 | GY/ YE | 6972 | II | — | Camera Signal 2 + | 13 | 0.5 | GY/ YE | 6972 | IV | — |
| 14 | 0.75 | RD/ WH | 2265 | I | — | 120 VAC Phase B 2 | 14 | 0.75 | RD/ WH | 2265 | IV | — |
| 15 | 0.35 | WH/ BU | 5986 | II | — | Serial Data Communication Enable | 15 | 0.5<br>0.5 | WH/ BU<br>WH/ BU | 5986<br>5986 | IV | Z45<br>— |
| 16 | 1 | WH/ VT | 1430 | I | — | Exterior Courtesy Lamp Control | 16 | 0.5 | WH/ VT | 1430 | III | — |
| 17 | 0.5 | GN/ GY | 3569 | I | — | Passive Entry Rear Closure Antenna Signal Lo | 17 | 0.5 | GN/ GY | 3569 | IV | — |
| 18 | 0.35 | BN | 2257 | II | — | Drain Wire | 18 | 0.5 | BN | 2257 | IV | — |
| 19 | 0.5 | BU/ GN | 1304 | I | — | High Speed GMLAN Serial Data (+)9 | 19 | 0.5 | BU/ GN | 1304 | IV | — |
| 20 | 0.5 | WH/ GN | 1305 | I | — | High Speed GMLAN Serial Data (-)9 | 20 | 0.5 | WH/ GN | 1305 | IV | — |

# X140 Chassis Harness to Body Harness



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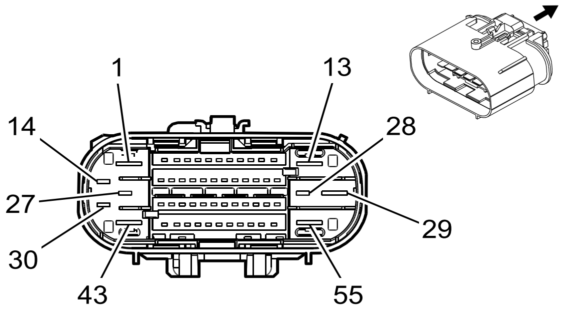

4993301

## Connector Part Information

Harness Type: Chassis

OEM Connector: 35027625

Service Connector: 84616677

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed (BK)

## Connector Part Information

Harness Type: Body

OEM Connector: 33357991

Service Connector: 19371183

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300649 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19332900 | J-35616-42 (RD) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | 19333088 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | 19370818 | J-35616-14 (GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| V | 13578881 | J-35616-5 (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VI | 19329756 | J-35616-32 (OR) | J-38125-36 | Not Available | Not Available | Not Available | Not Available |
| VII | 19352074 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VIII | 19352075 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IX | 19368968 | J-35616-5 (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## X140 Chassis Harness to Body Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5 | GN/VT | 1988 | II | — | Park Brake Motor Apply Right Rear Control | 1 | 2.5 | GN/VT | 1988 | VI | — |
| 2 | 1 | BN/GN | 19 | IV | — | Right Rear Stop/Turn Lamp Control | 2 | 1 | BN/GN | 19 | VIII | — |

## X140 Chassis Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | 0.5 | GY/YE | 7128 | I | — | Wheel Speed Sensor Control Right Rear | 3 | 0.5 | GY/YE | 7128 | VII | — |
| 4 | 0.5 | VT | 882 | I | — | Wheel Speed Sensor Signal Right Rear | 4 | 0.5 | VT | 882 | VII | — |
| 5 | 0.5 | GY/YE | 1760 | I | — | Left Side Object Detection LED Control | 5 | 0.35 | GY/YE | 1760 | VII | — |
| 6 | 0.5 | GY/WH | 7064 | I | — | Wheel Speed Sensor Control Left Front | 6 | 0.5 | GY/WH | 7064 | VII | — |
| 7 | 0.5 | GY | 830 | I | — | Wheel Speed Sensor Signal Left Front | 7 | 0.5 | GY | 830 | VII | — |
| 8 | 0.5 | GY/BN | 7065 | I | — | Wheel Speed Sensor Control Right Front | 8 | 0.5 | GY/BN | 7065 | VII | — |
| 9 | 0.5 | YE | 872 | I | — | Wheel Speed Sensor Signal Right Front | 9 | 0.5 | YE | 872 | VII | — |
| 10 | 0.5 | GY/BK | 7127 | I | — | Wheel Speed Sensor Control Left Rear | 10 | 0.5 | GY/BK | 7127 | VII | — |
| 11 | 0.5 | BU | 884 | I | — | Wheel Speed Sensor Signal Left Rear | 11 | 0.5 | BU | 884 | VII | — |
| 12 | 1 | YE/BU | 18 | IV | — | Left Rear Stop/Turn Lamp Control | 12 | 1 | YE/BU | 18 | VIII | — |
| 13 | 5 | WH | 2001 | II | — | Park Brake Motor Apply Left Rear Control | 13 | 2.5 | WH | 2001 | VI | — |
| 14 | 2.5 | RD/VT | 1242 | III | — | Battery Positive Voltage | 14 | 2<br>2 | RD/VT<br>RD/VT | 1242<br>1242 | V<br>IX | REGULAR CAB<br>EXTENDED CAB/CREW CAB |
| 15 | 0.5 | BN/BK | 7726 | I | — | Minor Endgate Motor Return | 15 | 0.5 | BN/BK | 7726 | VII | — |
| 16 | 0.5 | GY | 7292 | I | — | Major Endgate Release Switch Signal Exterior | 16 | 0.35 | GY | 7292 | VII | — |
| 17 | 0.5 | VT | 7725 | I | — | Minor Endgate Motor Supply Voltage | 17 | 0.5 | VT | 7725 | VII | — |
| 18 | 0.5 | GN/YE | 6846 | I | — | Rear License Lamp Control | 18 | 0.35 | GN/YE | 6846 | VII | — |
| 19 | 0.5 | YE/BK | 2224 | I | — | Trailer Brake Enable Signal | 19 | 0.5 | YE/BK | 2224 | VII | — |

## X140 Chassis Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 20 | 0.5 | GN/ YE | 1616 | I | — | Brake Lining Wear Sensor Signal Rear | 20 | 0.5 | GN/ YE | 1616 | VII | — |
| 21 | 0.5 | GN | 1299 | I | — | Major Endgate Motor Supply Voltage | 21 | 0.5 | GN | 1299 | VII | — |
| 22 | — | — | — | — | — | Not Occupied | 22 | — | — | — | — | — |
| 23 | 0.5 | VT/ GN | 439 | I | — | Run/Crank Ignition 1 Voltage | 23 | 0.5 | VT/ GN | 439 | VII | — |
| 24 | 0.5 | YE | 7294 | I | — | Minor Endgate Release Switch Discrete Signal Exterior | 24 | 0.35 | YE | 7294 | VII | — |
| 25 | 0.5 | BN/ WH | 2374 | I | — | Object Sensor Control | 25 | 0.5 | BN/ WH | 2374 | VII | — |
| 26 | 0.5 | YE/ BU | 2376 | I | — | Left Rear Middle Object Sensor Signal | 26 | 0.5 | YE/ BU | 2376 | VII | — |
| 27 | — | — | — | — | — | Ground | 27 | 2.5 | BK | 150 | IX | — |
| 28 | 2.5 | RD/ GY | 7040 | III | — | Battery Positive Voltage | 28 | 2.5 | RD/ GY | 7040 | IX | — |
| 29 | 5 | GY/ BK | 4369 | II | — | Park Brake Motor Low Reference Left Rear | 29 | 2.5 | GY/ BK | 4369 | VI | — |
| 30 | 2.5 | BU | 47 | III | — | Trailer Auxiliary Control | 30 | 2<br>2 | BU<br>BU | 47<br>47 | V<br>IX | REGULAR CAB<br>EXTENDED CAB/ CREW CAB |
| 31 | 0.5 | GY | 1198 | I | — | Endgate Release Switch Analog Signal Interior | 31 | 0.35 | GY | 1198 | VII | — |
| 32 | 0.5 | YE/ BK | 7730 | I | — | Major Endgate Motor Return | 32 | 0.5 | YE/ BK | 7730 | VII | — |
| 33 | 0.5 | WH | 1612 | I | — | Brake Lining Wear Sensor Signal Left Front | 33 | 0.5 | WH | 1612 | VII | — |
| 34 | 0.5 | GY/ BU | 7762 | I | — | Cargo Bed Lamp Control | 34 | 0.5 | GY/ BU | 7762 | VII | — |
| 35 | 0.5 | BU | 2500 | I | — | High Speed GMLAN Serial Data (+) 1 | 35 | 0.5 | BU | 2500 | VII | — |
| 36 | 0.5 | WH | 2501 | I | — | High Speed GMLAN Serial Data (-) 1 | 36 | 0.5 | WH | 2501 | VII | — |
| 37 | 0.5 | YE/ BU | 7295 | I | — | Left Minor Endgate Ajar Signal | 37 | 0.35 | YE/ BU | 7295 | VII | — |

## X140 Chassis Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38 | 0.5 | GN/BU | 2733 | I | — | Local Interconnect Network Bus 33 | 38 | 0.35 | GN/BU | 2733 | VII | — |
| 39 | 0.5 | WH | 6106 | I | — | High Speed GMLAN Serial Data (-) 2 | 39 | 0.5 | WH | 6106 | VII | — |
| 40 | 0.5 | YE/BK | 5356 | I | — | Left Tail Lamp Outage Detection Signal | 40 | 0.35 | YE/BK | 5356 | VII | — |
| 41 | 0.5 | BU/YE | 6105 | I | — | High Speed GMLAN Serial Data (+) 2 | 41 | 0.5 | BU/YE | 6105 | VII | — |
| 42 | 0.5 | WH | 6106 | I | — | High Speed GMLAN Serial Data (-) 2 | 42 | 0.5 | WH | 6106 | VII | — |
| 43 | 5 | GY | 4368 | II | — | Park Brake Motor Low Reference Right Rear | 43 | 2.5 | GY | 4368 | VI | — |
| 44 | — | — | — | — | — | Not Occupied | 44 | — | — | — | — | — |
| 45 | 0.5 | BK/GY | 2379 | I | — | Object Sensor Low Reference | 45 | 0.5 | BK/GY | 2379 | VII | — |
| 46 | 0.5 | YE/WH | 2377 | I | — | Right Rear Middle Object Sensor Signal | 46 | 0.5 | YE/WH | 2377 | VII | — |
| 47 | 0.5 | YE/VT | 2378 | I | — | Right Rear Corner Object Sensor Signal | 47 | 0.5 | YE/VT | 2378 | VII | — |
| 48 | 0.5 | GY | 1761 | I | — | Right Side Object Detection LED Control | 48 | 0.35 | GY | 1761 | VII | — |
| 49 | 0.5 | BN | 7754 | I | — | AC Power Outlet Enable | 49 | 0.5 | BN | 7754 | VII | — |
| 50 | 0.5 | VT/YE | 5357 | I | — | Right Tail Lamp Outage Detection Signal | 50 | 0.35 | VT/YE | 5357 | VII | — |
| 51 | 0.5 | WH/BN | 7296 | I | — | Right Minor Endgate Ajar Signal | 51 | 0.35 | WH/BN | 7296 | VII | — |
| 52 | 0.5 | YE | 2375 | I | — | Left Rear Corner Object Sensor Signal | 52 | 0.5 | YE | 2375 | VII | — |
| 53 | 0.5 | BU/YE | 6105 | I | — | High Speed GMLAN Serial Data (+) 2 | 53 | 0.5 | BU/YE | 6105 | VII | — |
| 54 | 1 | WH/BK | 2223 | IV | JL1 | Trailer Brake Control Signal | 54 | 1 | WH/BK | 2223 | VIII | JL1 |
| 55 | — | — | — | — | — | Battery Positive Voltage | 55 | 4 | RD/YE | 442 | VI | — |

# X143 DEF Jumper Harness to Chassis Harness (LM2)

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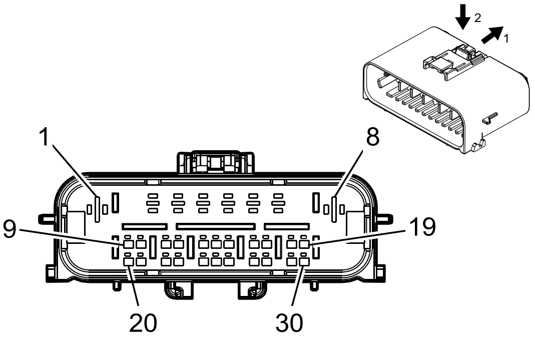


4817393

## Connector Part Information

Harness Type: DEF Jumper
OEM Connector: 2301462-7
Service Connector: Service by Harness - See Part Catalog
Description: 30-Way F

## Connector Part Information

Harness Type: Chassis
OEM Connector: 35099030
Service Connector: 19371177
Description: 30-Way M 1.2 MCON-CB, 2.8 MCP Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | 13575350 | J-35616-5 (PU) | J-38125-36 | 1-962915-3 | Yazaki 15 | E | 1 |
| III | 13575376 | J-35616-43 (RD) | J-38125-557 | Not Available | Not Available | Not Available | Not Available |
| IV | 19330704 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

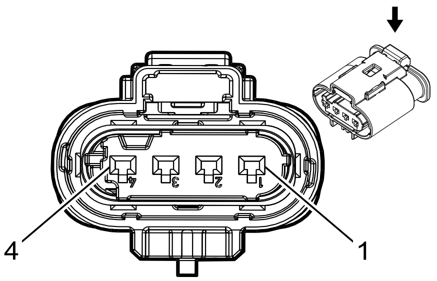
## X143 DEF Jumper Harness to Chassis Harness (LM2)

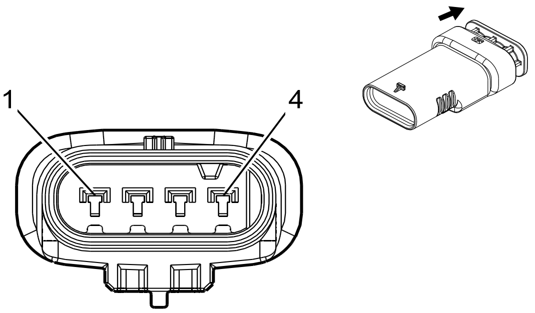
| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 3.0 | BK | 3921 | I | — | DEF Heater Supply 1 | 1 | 2.5 | BU | 3921 | III | — |
| 2 | 2.0 | RD | 3440 | I | — | Battery Positive Voltage | 2 | 1 | RD/WH | 3440 | II | — |
| 7 | 2.0 | BK | 1651 | I | — | Signal Ground | 7 | 0.75 | BK/WH | 1651 | II | — |
| 8 | 3.0 | WH | 1651 | I | — | Signal Ground | 8 | 2.5 | BK/WH | 1651 | III | — |
| 11 | 0.5 | BU | 4498 | I | — | High Speed GMLAN Serial Data (+) 7 | 11 | 0.5 | BU/BN | 4498 | IV | — |
| 12 | 0.5 | BN | 4499 | I | — | High Speed GMLAN Serial Data (-) 7 | 12 | 0.5 | WH | 4499 | IV | — |
| 14 | 0.5 | BK | 4320 | I | — | Selective Catalytic Reduction Power Module Wake-Up Signal | 14 | 0.5 | VT/GN | 4320 | IV | — |

## X143 DEF Jumper Harness to Chassis Harness (LM2) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15 | 0.5 | BK | 5985 | I | — | Accessory Wakeup Serial Data | 15 | 0.5 | VT/YE | 5985 | IV | — |
| 16 | 0.5 | BN | 2500 | I | — | High Speed GMLAN Serial Data (+) 1 | 16 | 0.5 | BU | 2500 | IV | — |
| 17 | 0.5 | BK | 2501 | I | — | High Speed GMLAN Serial Data (-) 1 | 17 | 0.5 | WH | 2501 | IV | — |
| 22 | 0.5 | BU | 4498 | I | — | High Speed GMLAN Serial Data (+) 7 | 22 | 0.5 | BU/BN | 4498 | IV | — |
| 23 | 0.5 | BN | 4499 | I | — | High Speed GMLAN Serial Data (-) 7 | 23 | 0.5 | WH | 4499 | IV | — |
| 25 | 0.5 | BN | 439 | I | — | Run/Crank Ignition 1 Voltage | 25 | 0.5 | VT/GN | 439 | IV | — |
| 27 | 0.5 | BU | 2500 | I | — | High Speed GMLAN Serial Data (+) 1 | 27 | 0.5 | BU | 2500 | IV | — |
| 28 | 0.5 | BN | 2501 | I | — | High Speed GMLAN Serial Data (-) 1 | 28 | 0.5 | WH | 2501 | IV | — |

# X153 Engine Harness to Coolant Temperature Jumper Harness (LM2)





## Connector Part Information

Harness Type: Engine
OEM Connector: 13815341
Service Connector: 13587299
Description: 4-Way F 1.2 Multilock Series, Sealed (BK)

## Connector Part Information

Harness Type: Coolant Temperature Jumper
OEM Connector: 10013906
Service Connector: 13587299
Description: 4-Way M 1.2 Multilock Series (GY)

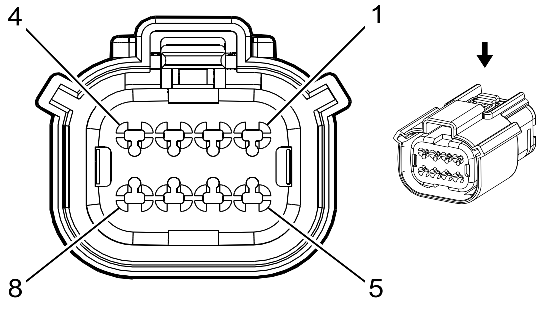
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X153 Engine Harness to Coolant Temperature Jumper Harness (LM2)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/VT | 2404 | I | — | Engine Block Coolant Temperature Signal | 1 | 0.5 | BU | 2404 | II | — |
| 2 | 0.5 | BK/GN | 580 | I | — | Engine Control Sensors Low Reference (2) | 2 | 0.5 | BK/GN | 580 | II | — |
| 3 | 0.5 | VT | 2988 | I | — | Engine Outlet Coolant Temperature Signal | 3 | 0.5 | VT | 2988 | II | — |
| 4 | 0.5 | BK/GN | 580 | I | — | Engine Control Sensors Low Reference (2) | 4 | 0.5 | BK/GN | 580 | II | — |

# X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/LV3)



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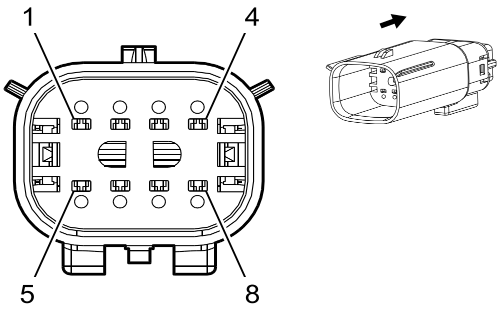


2667653

## Connector Part Information

Harness Type: Engine
OEM Connector: 13884361
Service Connector: 19366859
Description: 8-Way F 1.5 Series, Sealed (BK)

## Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 35021067
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 150 MX Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

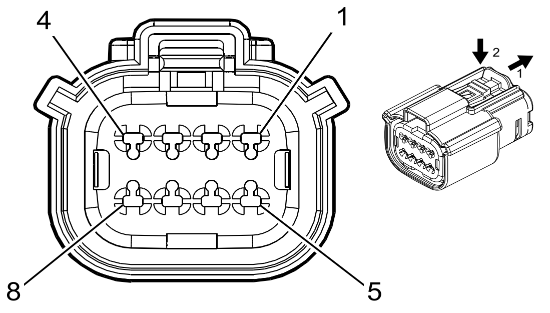
## X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/LV3)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/BU | 5300 | I | — | Camshaft Position Intake Sensor Control 1 | 1 | 0.5 | GY/BU | 5300 | II | — |
| 2 | 0.5 | BK/GN | 5301 | I | — | Camshaft Position Intake Sensor Low Reference 1 | 2 | 0.5 | BK/GN | 5301 | II | — |
| 3 | 0.5 | YE/VT | 5275 | I | — | Camshaft Position Intake Sensor 1 | 3 | 0.5 | YE/VT | 5275 | II | — |
| 4 | 0.5 | BU | 179 | I | — | Oil Pump Command Signal | 4 | 0.5 | BU | 179 | II | — |
| 5 | 0.5 | VT/BN | 5284 | I | — | Camshaft Phaser Intake Solenoid 1 | 5 | 0.5 | VT/BN | 5284 | II | — |
| 6 | 0.5 | BK/BN | 6753 | I | — | Cam Phaser W Low Reference | 6 | 0.5 | BK/BN | 6753 | II | — |

## X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L82/LV3) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5<br>0.75 | VT/BU<br>VT/BU | 5293<br>5293 | I<br>I | L3B<br>L84/L87 | Powertrain Main Relay Fused Supply 4<br>Powertrain Main Relay Fused Supply 4 | 7 | 0.5 | VT/BU | 5293 | II | — |
| 8 | — | — | — | — | — | Not Occupied | 8 | — | — | — | — | — |

# X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L84/L87)



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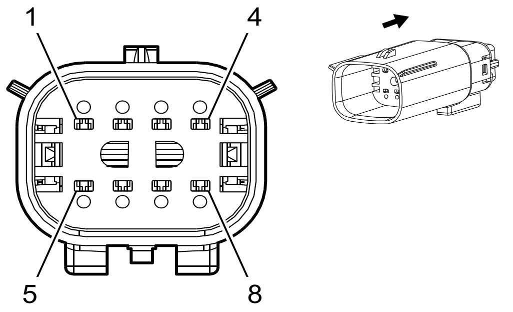


2667653

## Connector Part Information

Harness Type: Engine
OEM Connector: 35063116
Service Connector: 19366859
Description: 8-Way F 150 MX Series, Sealed (BK)

## Connector Part Information

Harness Type: Camshaft Position Sensor Jumper
OEM Connector: 13520589
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 150 MX Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

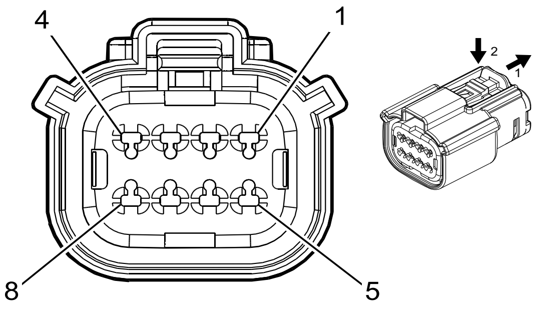
## X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L84/L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | GY/BU | 5300 | I | — | Camshaft Position Intake Sensor Control 1 | 1 | 0.5 | GY/BU | 5300 | II | — |
| 2 | 0.5 | BK/GN | 5301 | I | — | Camshaft Position Intake Sensor Low Reference 1 | 2 | 0.5 | BK/GN | 5301 | II | — |
| 3 | 0.5 | YE/VT | 5275 | I | — | Camshaft Position Intake Sensor 1 | 3 | 0.5 | YE/VT | 5275 | II | — |
| 4 | 0.5 | BU | 179 | I | — | Oil Pump Command Signal | 4 | 0.5 | BU | 179 | II | — |
| 5 | 0.5 | VT/BN | 5284 | I | — | Camshaft Phaser Intake Solenoid 1 | 5 | 0.5 | VT/BN | 5284 | II | — |
| 6 | 0.5 | BK/BN | 6753 | I | — | Cam Phaser W Low Reference | 6 | 0.5 | BK/BN | 6753 | II | — |

## X154 Engine Harness to Camshaft Position Sensor Jumper Harness (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | VT/BU | 5293 | I | — | Powertrain Main Relay Fused Supply 4 | 7 | 0.5 | VT/BU | 5293 | II | — |
| 8 | — | — | — | — | — | Not Occupied | 8 | — | — | — | — | — |

# X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L84/L87)



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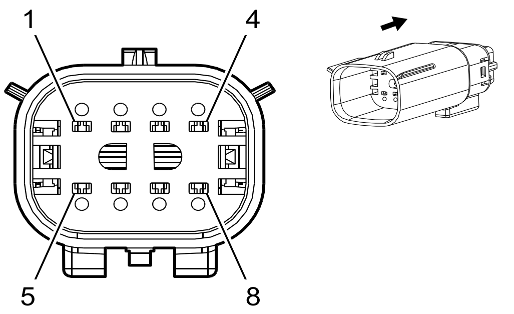


2667653

## Connector Part Information

Harness Type: Engine
OEM Connector: 35037827
Service Connector: 19366859
Description: 8-Way F 150 MX Series, Sealed (BK)

## Connector Part Information

Harness Type: Active Fuel Management Solenoid Jumper
OEM Connector: 13520577
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M 150 MX Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

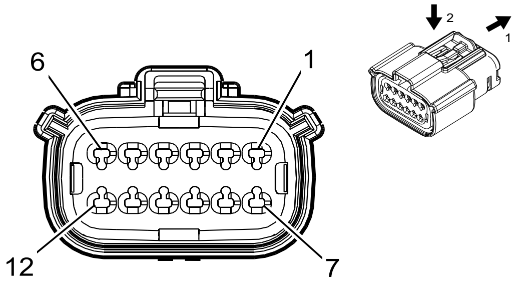
## X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L84/L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/GN | 2492 | I | — | Cylinder Shutoff Solenoid Enable (2) | 1 | 0.5 | WH/GN | 2492 | II | — |
| 2 | 0.5 | GN | 5492 | I | — | Cylinder Shutoff Solenoid Control 2 | 2 | 0.5 | GN | 5492 | II | — |
| 3 | 0.5 | YE/GY | 2493 | I | — | Cylinder Shutoff Solenoid Enable (3) | 3 | 0.5 | YE/GY | 2493 | II | — |
| 4 | 0.5 | GY | 5493 | I | — | Cylinder Shutoff Solenoid Control 3 | 4 | 0.5 | GY | 5493 | II | — |
| 5 | 0.5 | WH/VT | 2495 | I | — | Cylinder Shutoff Solenoid Enable (5) | 5 | 0.5 | WH/VT | 2495 | II | — |
| 6 | 0.5 | VT | 5495 | I | — | Cylinder Shutoff Solenoid Control 5 | 6 | 0.5 | VT | 5495 | II | — |

## X155 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | WH/ YE | 2498 | I | — | Cylinder Shutoff Solenoid Enable (8) | 7 | 0.5 | WH/ YE | 2498 | II | — |
| 8 | 0.5 | YE | 5498 | I | — | Cylinder Shutoff Solenoid Control 8 | 8 | 0.5 | YE | 5498 | II | — |

# X156 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L82/L84/L87)



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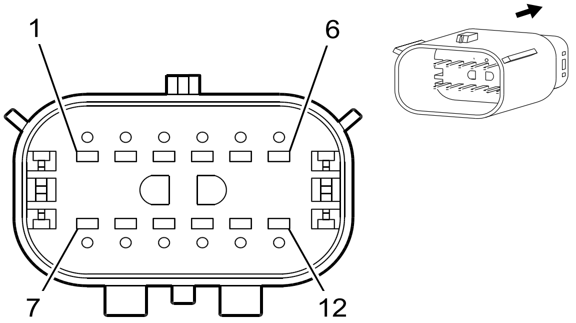

1825167

## Connector Part Information

Harness Type: Engine
OEM Connector: 33362189
Service Connector: 13503528
Description: 12-Way F 150 MX Series, Sealed (BK)

## Connector Part Information

Harness Type: Active Fuel Management Solenoid Jumper
OEM Connector: 13520609
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 150 MX Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13578813 | J-35616-2A (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X156 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L82/L84/L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/BU | 2491 | I | — | Cylinder Shutoff Solenoid Enable (1) | 1 | 0.5 | WH/BU | 2491 | II | — |
| 2 | 0.5 | BU | 5491 | I | — | Cylinder Shutoff Solenoid Control 1 | 2 | 0.5 | BU | 5491 | II | — |
| 3 | 0.5 | YE/GN | 2494 | I | — | Cylinder Shutoff Solenoid Enable (4) | 3 | 0.5 | YE/GN | 2494 | II | — |
| 4 | 0.5 | YE/BU | 5494 | I | — | Cylinder Shutoff Solenoid Control 4 | 4 | 0.5 | YE/BU | 5494 | II | — |
| 5 | 0.5 | YE/BN | 2496 | I | — | Cylinder Shutoff Solenoid Enable (6) | 5 | 0.5 | YE/BN | 2496 | II | — |
| 6 | 0.5 | BN | 5496 | I | — | Cylinder Shutoff Solenoid Control 6 | 6 | 0.5 | BN | 5496 | II | — |

## X156 Engine Harness to Active Fuel Management Solenoid Jumper Harness (L82/L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | GN/GY | 2497 | I | — | Cylinder Shutoff Solenoid Enable (7) | 7 | 0.5 | GN/GY | 2497 | II | — |
| 8 | 0.5 | WH | 5497 | I | — | Cylinder Shutoff Solenoid Control 7 | 8 | 0.5 | WH | 5497 | II | — |
| 9 | 0.5 | BU | 410 | I | — | Engine Coolant Temperature Sensor Signal | 9 | 0.5 | BU | 410 | II | — |
| 10 | 0.5 | BK/YE | 548 | I | — | Engine Control Sensors Low Reference (1) | 10 | 0.5 | BK/BN | 2761 | II | — |
| 11 - 12 | — | — | — | — | — | Not Occupied | 11 - 12 | — | — | — | — | — |

# X157 Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Harness (L82/L84/L87)

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### Connector Part Information

Harness Type: Active Fuel Management Solenoid Jumper
OEM Connector: 13257299
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way F

### Connector Part Information

Harness Type: Active Fuel Management Solenoid Jumper
OEM Connector: 12670796
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

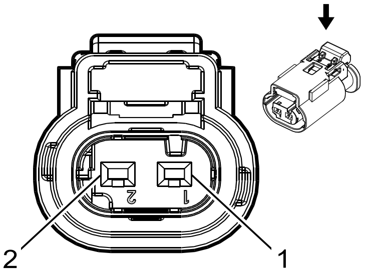
## X157 Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Harness (L82/L84/L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | WH/GN | 2492 | I | L84/L87 | Cylinder Shutoff Solenoid Enable (2) | 1 | 0.5 | WH/GN | 2492 | II | L84/L87 |
| 2 | 0.5 | GN | 5492 | I | L84/L87 | Cylinder Shutoff Solenoid Control 2 | 2 | 0.5 | GN | 5492 | II | L84/L87 |
| 3 | 0.5 | YE/GY | 2493 | I | L84/L87 | Cylinder Shutoff Solenoid Enable (3) | 3 | 0.5 | YE/GY | 2493 | II | L84/L87 |
| 4 | 0.5 | GY | 5493 | I | L84/L87 | Cylinder Shutoff Solenoid Control 3 | 4 | 0.5 | GY | 5493 | II | L84/L87 |
| 5 | 0.5 | WH/VT | 2495 | I | L84/L87 | Cylinder Shutoff Solenoid Enable (5) | 5 | 0.5 | WH/VT | 2495 | II | L84/L87 |
| 6 | 0.5 | VT | 5495 | I | L84/L87 | Cylinder Shutoff Solenoid Control 5 | 6 | 0.5 | VT | 5495 | II | L84/L87 |
| 7 | 0.5 | WH/YE | 2498 | I | L84/L87 | Cylinder Shutoff Solenoid Enable (8) | 7 | 0.5 | WH/YE | 2498 | II | L84/L87 |
| 8 | 0.5 | YE | 5498 | I | L84/L87 | Cylinder Shutoff Solenoid Control 8 | 8 | 0.5 | YE | 5498 | II | L84/L87 |
| 9 | 0.5 | WH/BU | 2491 | I | — | Cylinder Shutoff Solenoid Enable (1) | 9 | 0.5 | WH/BU | 2491 | II | — |

## X157 Active Fuel Management Solenoid Jumper Harness to Active Fuel Management Harness (L82/L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.5 | BU | 5491 | I | — | Cylinder Shutoff Solenoid Control 1 | 10 | 0.5 | BU | 5491 | II | — |
| 11 | 0.5 | YE/GN | 2494 | I | — | Cylinder Shutoff Solenoid Enable (4) | 11 | 0.5 | YE/GN | 2494 | II | — |
| 12 | 0.5 | YE/BU | 5494 | I | — | Cylinder Shutoff Solenoid Control 4 | 12 | 0.5 | YE/BU | 5494 | II | — |
| 13 | 0.5 | YE/BN | 2496 | I | — | Cylinder Shutoff Solenoid Enable (6) | 13 | 0.5 | YE/BN | 2496 | II | — |
| 14 | 0.5 | BN | 5496 | I | — | Cylinder Shutoff Solenoid Control 6 | 14 | 0.5 | BN | 5496 | II | — |
| 15 | 0.5 | GN/GY | 2497 | I | — | Cylinder Shutoff Solenoid Enable (7) | 15 | 0.5 | GN/GY | 2497 | II | — |
| 16 | 0.5 | WH | 5497 | I | — | Cylinder Shutoff Solenoid Control 7 | 16 | 0.5 | WH | 5497 | II | — |

# X158 Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness (L3B/LM2)



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2717066

## Connector Part Information

Harness Type: Engine

OEM Connector: 13735326

Service Connector: 13587326

Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

## Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper

OEM Connector: Not Available

Service Connector: Service by Harness - See Part Catalog

Description: 2-Way M

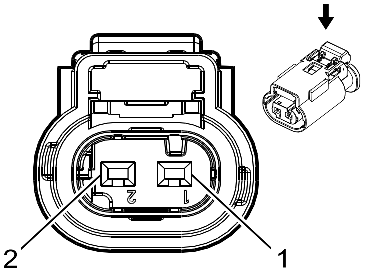
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X158 Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness (L3B/LM2)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | YE/BN | 106 | I | — | Oil Pump Motor Control | 1 | 0.5 | YE/BN | 106 | II | — |
| 2 | 0.5 | BU | 179 | I | — | Oil Pump Command Signal | 2 | 0.5 | BU | 179 | II | — |

# X158 Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness (L87)



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2717066

## Connector Part Information

Harness Type: Camshaft Position Sensor Jumper

OEM Connector: 13735326

Service Connector: Service by Harness - See Part Catalog

Description: 2-Way F 1.2 Multilock Series, Sealed (BK)

## Connector Part Information

Harness Type: Engine Oil Pressure Control Solenoid Valve Jumper

OEM Connector: Not Available

Service Connector: Service by Harness - See Part Catalog

Description: 2-Way M

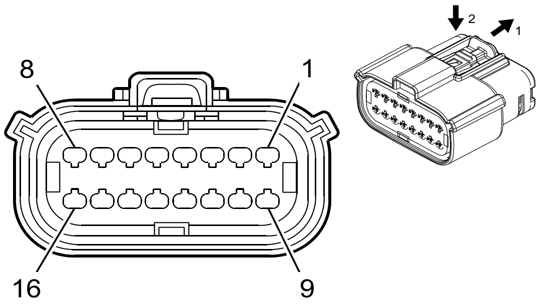
### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### X158 Camshaft Position Sensor Jumper Harness to Engine Oil Control Solenoid Jumper Harness (L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/BU | 5293 | I | — | Powertrain Main Relay Fused Supply 4 | 1 | 0.5 | VT/BU | 5293 | II | — |
| 2 | 0.5 | BU | 179 | I | — | Oil Pump Command Signal | 2 | 0.5 | BU | 179 | II | — |

## X160 Engine Harness to Fuel Rail Harness (L3B)



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4574233

### Connector Part Information

Harness Type: Engine
OEM Connector: 33386201
Service Connector: Not Available
Description: 16-Way F 150 MX Series, Sealed (BK)

### Connector Part Information

Harness Type: Fuel Rail
OEM Connector: 13520643
Service Connector: Service by Harness - See Part Catalog
Description: 16-Way M

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13578813 | J-35616-2A (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| II | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

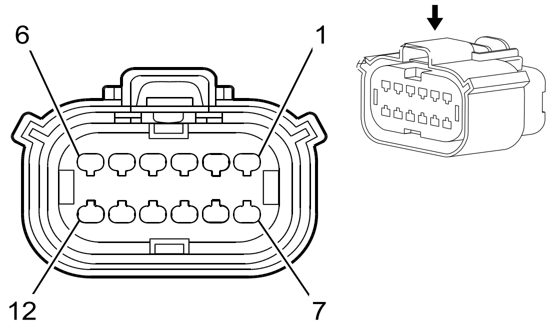
### X160 Engine Harness to Fuel Rail Harness (L3B)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | VT/GY | 496 | I | — | Knock Sensor Signal 1 | 1 | 0.5 | VT/GY | 496 | II | — |
| 2 | 0.75 | BN | 4801 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 | 2 | 0.8 | BN | 4801 | II | — |
| 3 | 0.5 | WH/RD | 480 | I | — | Engine Control Sensors 5 Volt Reference (2) | 3 | 0.5 | WH/RD | 480 | II | — |
| 4 | 0.75 | GY/BU | 4804 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 4 | 4 | 0.8 | GY/BU | 4804 | II | — |
| 5 | — | — | — | — | — | Not Occupied | 5 | — | — | — | — | — |
| 6 | 0.75 | GN | 4803 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 3 | 6 | 0.8 | GN | 4803 | II | — |

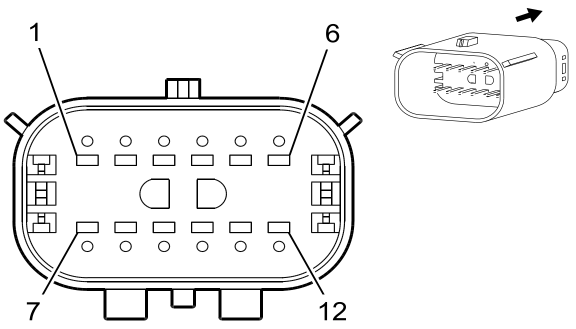
## X160 Engine Harness to Fuel Rail Harness (L3B) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.75 | BU | 4802 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 | 7 | 0.8 | BU | 4802 | II | — |
| 8 | 0.5 | WH/GY | 1876 | I | — | Knock Sensor Signal 2 | 8 | 0.5 | WH/GY | 1876 | II | — |
| 9 | 0.5 | BK/YE | 1716 | I | — | Knock Sensor Low Reference 1 | 9 | 0.5 | BK/YE | 1716 | II | — |
| 10 | 0.75 | BN/WH | 4901 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 | 10 | 0.8 | BN/WH | 4901 | II | — |
| 11 | 0.5 | BU/WH | 2918 | I | — | Fuel Rail Pressure Sensor Signal | 11 | 0.5 | BU/WH | 2918 | II | — |
| 12 | 0.5 | BK/GN | 580 | I | — | Engine Control Sensors Low Reference (2) | 12 | 0.5 | BK/GN | 580 | II | — |
| 13 | 0.75 | BU/WH | 4904 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4 | 13 | 0.8 | BU/WH | 4904 | II | — |
| 14 | 0.75 | GN/GY | 4903 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3 | 14 | 0.8 | GN/GY | 4903 | II | — |
| 15 | 0.75 | BU/GY | 4902 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2 | 15 | 0.8 | BU/GY | 4902 | II | — |
| 16 | 0.5 | BK/GY | 2303 | I | — | Knock Sensor Low Reference 2 | 16 | 0.5 | BK/GY | 2303 | II | — |

# X160 Engine Harness to Bank 1 Fuel Rail Harness (L82/L84/L87)



1825165



1825167

## Connector Part Information

Harness Type: Engine
OEM Connector: 13653762
Service Connector: 13503528
Description: 12-Way F 1.5 Series, Sealed (BK)

## Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13503542
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 150 MX Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13578813 | J-35616-2A (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

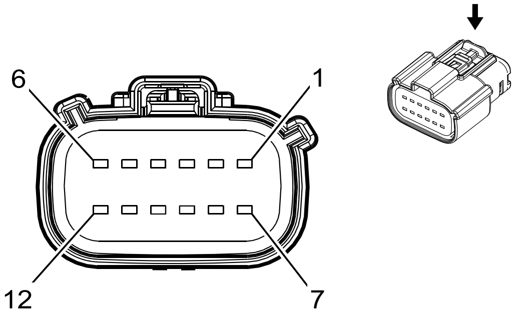
## X160 Engine Harness to Bank 1 Fuel Rail Harness (L82/L84/L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BN/WH | 4901 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 | 1 | 0.75 | BN/WH | 4901 | II | — |
| 2 | 0.75 | GN/BK | 4903 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3 | 2 | 0.75 | GN/GY | 4903 | II | — |
| 3 | 0.75 | GN/WH | 4905 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5 | 3 | 0.75 | GN/WH | 4905 | II | — |
| 4 | 0.75 | WH/YE | 4907 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 7 | 4 | 0.75 | WH/YE | 4907 | II | — |
| 5 | 0.75 | BN | 4801 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 | 5 | 0.75 | BN | 4801 | II | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |

## X160 Engine Harness to Bank 1 Fuel Rail Harness (L82/L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.75 | GN | 4803 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 3 | 7 | 0.75 | GN | 4803 | II | — |
| 8 | 0.75 | WH/GN | 4805 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 5 | 8 | 0.75 | WH/GN | 4805 | II | — |
| 9 | 0.75 | YE/GY | 4807 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 7 | 9 | 0.75 | YE/GY | 4807 | II | — |
| 10 | 0.5 | WH/RD | 480 | I | — | Engine Control Sensors 5 Volt Reference (2) | 10 | 0.5 | BN/RD | 480 | II | — |
| 11 | 0.5 | BU/WH | 2918 | I | — | Fuel Rail Pressure Sensor Signal | 11 | 0.5 | BU/WH | 2918 | II | — |
| 12 | 0.5 | BK/YE | 548 | I | — | Engine Control Sensors Low Reference (1) | 12 | 0.5 | BK/GN | 548 | II | — |

# X160 Engine Harness to Fuel Injector Harness (LM2)



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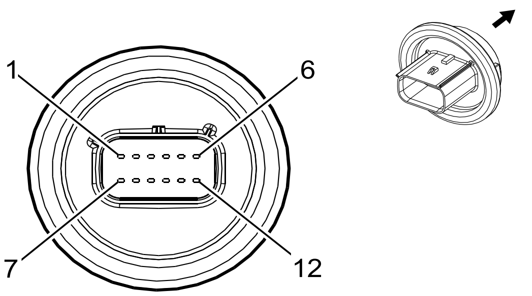


3610369

## Connector Part Information

Harness Type: Engine
OEM Connector: 33221171
Service Connector: 19333239
Description: 12-Way F 150 MX Series, Sealed (D-GY)

## Connector Part Information

Harness Type: Fuel Injector
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19368973 | J-35616-2A (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| II | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

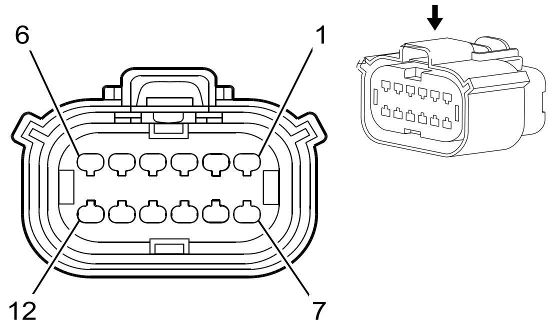
## X160 Engine Harness to Fuel Injector Harness (LM2)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.5 | BN/WH | 4901 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 | 1 | 1.5 | BN/WH | 4901 | II | — |
| 2 | 1.5 | BN | 4801 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 | 2 | 1.5 | BN | 4801 | II | — |
| 3 | 1.5 | BU/GY | 4902 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2 | 3 | 1.5 | BU/GY | 4902 | II | — |
| 4 | 1.5 | BU | 4802 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 | 4 | 1.5 | BU | 4802 | II | — |
| 5 | 1.5 | GN/GY | 4903 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3 | 5 | 1.5 | GN/GY | 4903 | II | — |

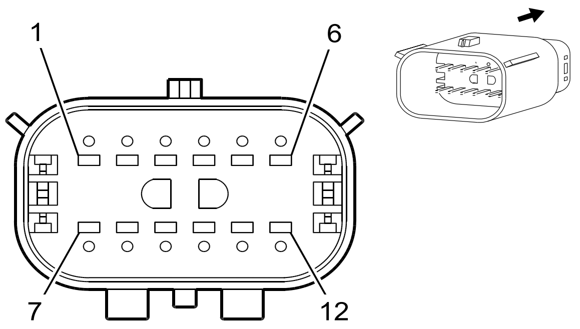
## X160 Engine Harness to Fuel Injector Harness (LM2) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 1.5 | GN | 4803 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 3 | 6 | 1.5 | GN | 4803 | II | — |
| 7 | 1.5 | BU/ WH | 4904 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4 | 7 | 1.5 | BU/ WH | 4904 | II | — |
| 8 | 1.5 | GY/ BU | 4804 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 4 | 8 | 1.5 | GY/ BU | 4804 | II | — |
| 9 | 1.5 | GN/ WH | 4905 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5 | 9 | 1.5 | GN/ WH | 4905 | II | — |
| 10 | 1.5 | WH/ GN | 4805 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 5 | 10 | 1.5 | WH/ GN | 4805 | II | — |
| 11 | 1.5 | VT/ GY | 4906 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6 | 11 | 1.5 | VT/ GY | 4906 | II | — |
| 12 | 1.5 | VT/ GN | 4806 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 6 | 12 | 1.5 | VT/ GN | 4806 | II | — |

# X160 Engine Harness to Bank 1 Fuel Rail Harness (LV3)



1825165



1825167

### Connector Part Information

Harness Type: Engine
OEM Connector: 13609715
Service Connector: 19178148
Description: 12-Way F 1.5 Series, Sealed (BK)

### Connector Part Information

Harness Type: Bank 1 Fuel Rail
OEM Connector: 13503543
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 150 MX Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13578813 | J-35616-2A (GY) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 13578813 | J-35616-2A (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| III | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

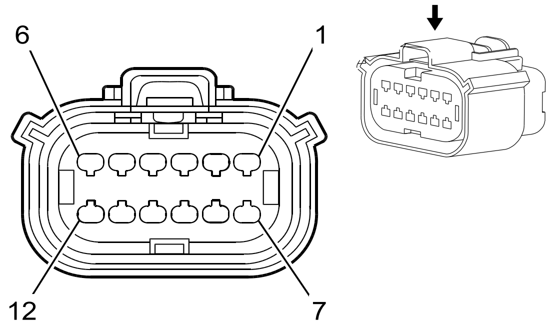
## X160 Engine Harness to Bank 1 Fuel Rail Harness (LV3)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | 0.75 | BN/WH | 4901 | II | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 1 | 2 | 0.75 | BN/WH | 4901 | III | — |
| 3 | 0.75 | GN/GY | 4903 | II | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 3 | 3 | 0.75 | GN/GY | 4903 | III | — |
| 4 | 0.75 | GN/WH | 4905 | II | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 5 | 4 | 0.75 | GN/WH | 4905 | III | — |
| 5 | 0.75 | BN | 4801 | II | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 1 | 5 | 0.75 | BN | 4801 | III | — |
| 6 - 7 | — | — | — | — | — | Not Occupied | 6 - 7 | — | — | — | — | — |

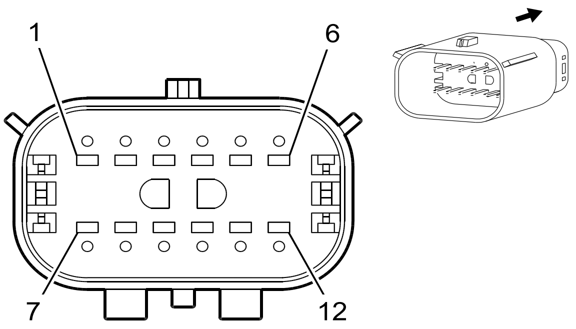
## X160 Engine Harness to Bank 1 Fuel Rail Harness (LV3) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0.75 | GN | 4803 | II | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 3 | 8 | 0.75 | GN | 4803 | III | — |
| 9 | 0.75 | WH/GN | 4805 | II | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 5 | 9 | 0.75 | WH/GN | 4805 | III | — |
| 10 | 0.5 | WH/RD | 480 | I | — | Engine Control Sensors 5 Volt Reference (2) | 10 | 0.5 | BN/RD | 480 | III | — |
| 11 | 0.5 | BU/WH | 2918 | I | — | Fuel Rail Pressure Sensor Signal | 11 | 0.5 | BU/WH | 2918 | III | — |
| 12 | 0.5 | BK/YE | 548 | I | — | Engine Control Sensors Low Reference (1) | 12 | 0.5 | BK/GN | 548 | III | — |

## X161 Engine Harness to Bank 2 Fuel Rail Harness (L82/L84/L87)



1825165



1825167

### Connector Part Information

Harness Type: Engine
OEM Connector: 13922706
Service Connector: 13503528
Description: 12-Way F 1.5 Series, Sealed (BK)

### Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: 13577094
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M 150 MX Series, Sealed (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13578813 | J-35616-2A (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| II | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

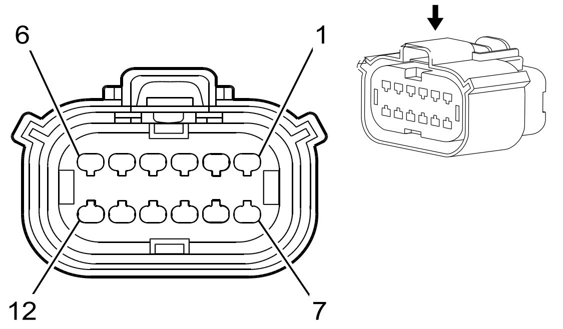
### X161 Engine Harness to Bank 2 Fuel Rail Harness (L82/L84/L87)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BN/GN | 4902 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2 | 1 | 0.75 | BU/GY | 4902 | II | — |
| 2 | 0.75 | BU/WH | 4904 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4 | 2 | 0.75 | BU/WH | 4904 | II | — |
| 3 | 0.75 | VT | 4906 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6 | 3 | 0.75 | VT/GY | 4906 | II | — |
| 4 | 0.75 | WH/GN | 4908 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 8 | 4 | 0.75 | GY/WH | 4908 | II | — |
| 5 | 0.75 | BU | 4802 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 | 5 | 0.75 | BU | 4802 | II | — |
| 6 - 7 | — | — | — | — | — | Not Occupied | 6 - 7 | — | — | — | — | — |

## X161 Engine Harness to Bank 2 Fuel Rail Harness (L82/L84/L87) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0.75 | GY/ BU | 4804 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 4 | 8 | 0.75 | GY/ BU | 4804 | II | — |
| 9 | 0.75 | GN/ VT | 4806 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 6 | 9 | 0.75 | VT/ GN | 4806 | II | — |
| 10 | 0.75 | GY | 4808 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 8 | 10 | 0.75 | GY | 4808 | II | — |
| 11 | 0.75 | VT/ BK | 7300 | I | — | High Pressure Fuel Pump Actuator Low - Control | 11 | 0.75 | VT/ BK | 7300 | II | — |
| 12 | 0.75 | YE | 7301 | I | — | High Pressure Fuel Pump Actuator High - Control | 12 | 0.75 | YE | 7301 | II | — |

# X161 Engine Harness to Bank 2 Fuel Rail Harness (LV3)



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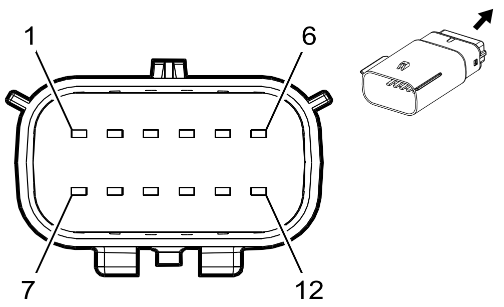


2687960

## Connector Part Information

Harness Type: Engine
OEM Connector: 13863397
Service Connector: 19329931
Description: 12-Way F 1.5 Series, Sealed (BK)

## Connector Part Information

Harness Type: Bank 2 Fuel Rail
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13578813 | J-35616-2A (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

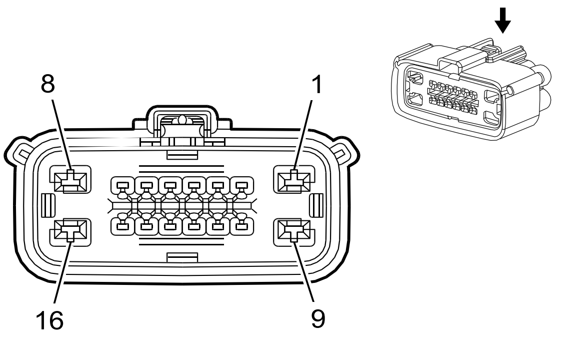
## X161 Engine Harness to Bank 2 Fuel Rail Harness (LV3)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | 0.75 | BU/GY | 4902 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 2 | 2 | 0.75 | BU/GY | 4902 | II | — |
| 3 | 0.75 | BU/WH | 4904 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 4 | 3 | 0.75 | BU/WH | 4904 | II | — |
| 4 | 0.75 | VT/GY | 4906 | I | — | Direct Fuel Injector (DFI) High Voltage Supply Cylinder 6 | 4 | 0.75 | VT/GY | 4906 | II | — |
| 5 | 0.75 | BU | 4802 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 2 | 5 | 0.75 | BU | 4802 | II | — |
| 6 - 7 | — | — | — | — | — | Not Occupied | 6 - 7 | — | — | — | — | — |

## X161 Engine Harness to Bank 2 Fuel Rail Harness (LV3) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0.75 | GY/BU | 4804 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 4 | 8 | 0.75 | GY/BU | 4804 | II | — |
| 9 | 0.75 | VT/GN | 4806 | I | — | Direct Fuel Injector (DFI) High Voltage Control Cylinder 6 | 9 | 0.75 | VT/GN | 4806 | II | — |
| 10 | 0.75 | VT/BK | 7300 | I | — | High Pressure Fuel Pump Actuator Low - Control | 10 | 0.75 | VT/BK | 7300 | II | — |
| 11 | 0.75 | YE | 7301 | I | — | High Pressure Fuel Pump Actuator High - Control | 11 | 0.75 | YE | 7301 | II | — |
| 12 | — | — | — | — | — | Not Occupied | 12 | — | — | — | — | — |

# X171 Engine Harness to Chassis Harness



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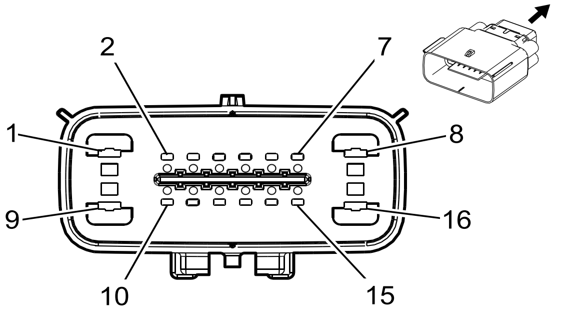


2373686

## Connector Part Information

Harness Type: Engine
OEM Connector: 33218250
Service Connector: 19352906
Description: 16-Way F 1.5, 2.8 Series, Sealed (BK)

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33129084
Service Connector: 19331031
Description: 16-Way M 1.5, 2.8 Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576376 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | A | 4 |
| II | 13576377 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | 4 | D |
| III | 13576377 | J-35616-35 (VT) | J-38125-12A | 1326030-8 | Lear 17 | A | 4 |
| IV | 19300432 | J-35616-2A (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| V | 19119395 | J-35616-3 (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| VI | 19329833 | J-35616-5 (PU) | J-38125-12A | 1326030-6 | Lear 17 | E | 2 |
| VII | 19332835 | J-35616-5 (PU) | J-38125-12A | Not Available | Not Available | Not Available | Not Available |

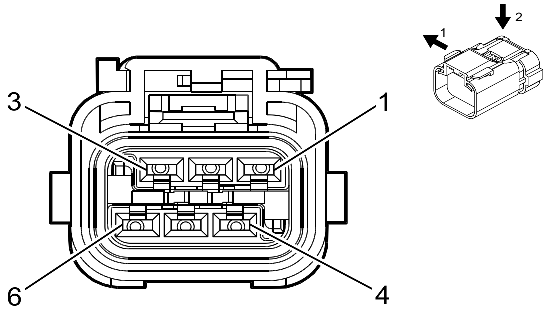
## X171 Engine Harness to Chassis Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | VT/GN | 355 | II | — | Fuel Filter Heater Voltage | 1 | 2.5 | VT/GN | 355 | VII | — |
| 2 | 0.5 | VT/YE | 5985 | IV | LB3 | Accessory Wakeup Serial Data | 2 | 0.5 | VT/YE | 5985 | V | — |
| 3 | 0.5 | BU/BN | 4498 | IV | — | High Speed GMLAN Serial Data (+) 7 | 3 | 0.5 | BU/BN | 4498 | V | — |
| 4 | 0.5 | BU/WH | 7446 | IV | — | Fuel Line Pressure Sensor Signal | 4 | 0.5 | BU/WH | 7446 | V | — |

## X171 Engine Harness to Chassis Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 0.5 | BK/GN | 580 | IV | — | Engine Control Sensors Low Reference (2) | 5 | 0.5 | BK/YE | 7447 | V | — |
| 6 | 0.5 | WH | 1579 | IV | — | Fuel Temperature/Composition Signal | 6 | 0.5 | WH | 1579 | V | — |
| 7 | 0.5 | VT/GN | 4320 | IV | — | Selective Catalytic Reduction Power Module Wake-Up Signal | 7 | 0.5 | VT/GN | 4320 | V | — |
| 8 | 0.5 | BK/WH | 451 | I | — | Signal Ground | 8 | 0.5 | BK/WH | 451 | VI | — |
| 9 | 1.5 | VT/BU | 3674 | III | — | NOx Sensor 1 Control | 9 | 1.5 | VT/BU | 3674 | VII | — |
| 10 | 0.5 | VT/GN | 5294 | IV | FHS | Powertrain Main Relay Fused Supply 5 | 10 | 0.5 | VT/BU | 5294 | V | FHS |
| 11 | 0.5 | WH | 4499 | IV | — | High Speed GMLAN Serial Data (-) 7 | 11 | 0.5 | WH | 4499 | V | — |
| 12 | — | — | — | — | — | Not Occupied | 12 | — | — | — | — | — |
| 13 | 0.5 | BU/RD | 460 | IV | — | Engine Control Sensors 5 Volt Reference (1) | 13 | 0.5 | BN/RD | 7445 | V | — |
| 14 | — | — | — | — | — | Not Occupied | 14 | — | — | — | — | — |
| 15 | 0.75<br>0.5 | GN/GY<br>GN/GY | 465<br>465 | IV<br>IV | L3B<br>LV3 | Fuel Pump Primary Relay Control<br>Fuel Pump Primary Relay Control | 15 | 0.5 | GN/GY | 465 | V | — |
| 16 | 2.5 | BU | 3921 | II | — | DEF Heater Supply 1 | 16 | 2.5 | BU | 3921 | VII | — |

# X172 Engine Harness to Glow Plug Jumper Harness (LM2)



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4997615

### Connector Part Information

Harness Type: Engine
OEM Connector: 15419838
Service Connector: 19371212
Description: 6-Way F 2.8 APEX Series, Sealed (BK)

### Connector Part Information

Harness Type: Glow Plug Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M

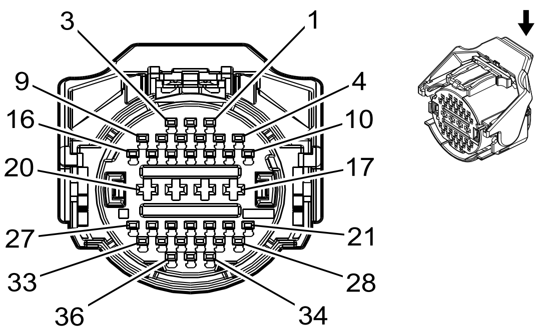
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X172 Engine Harness to Glow Plug Jumper Harness (LM2)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | GY/BU | 1581 | I | — | Glow Plug Control 1 | 1 | 2.5 | GY/BU | 1581 | II | — |
| 2 | 2.5 | GY/BN | 1582 | I | — | Glow Plug Control 2 | 2 | 2.5 | GY/BN | 1582 | II | — |
| 3 | 2.5 | GY/GN | 1583 | I | — | Glow Plug Control 3 | 3 | 2.5 | GY/GN | 1583 | II | — |
| 4 | 2.5 | GY/YE | 1584 | I | — | Glow Plug Control 4 | 4 | 2.5 | GY/YE | 1584 | II | — |
| 5 | 2.5 | GY/WH | 1585 | I | — | Glow Plug Control 5 | 5 | 2.5 | GY/WH | 1585 | II | — |
| 6 | 2.5 | GY/VT | 1586 | I | — | Glow Plug Control 6 | 6 | 2.5 | GY/VT | 1586 | II | — |

# X175 Engine Harness to Transmission Harness (MQE)



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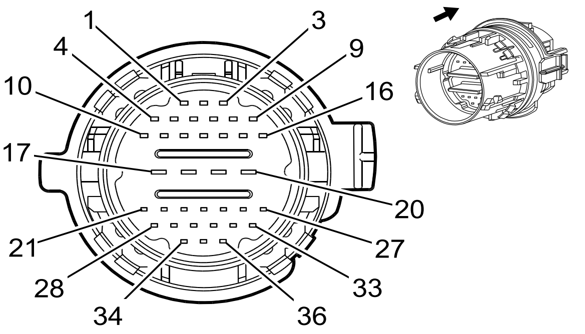


3977661

## Connector Part Information

Harness Type: Engine

OEM Connector: 15532799

Service Connector: 19332681

Description: 36-Way F 1.2 MCON-CB, 2.8 MCP Series, Sealed (BK)

## Connector Part Information

Harness Type: Transmission

OEM Connector: 2138338–5

Service Connector: Service by Harness - See Part Catalog

Description: 36-Way M

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19119772 | J-35616-35 (VT) | J-38125-215A | 1241388-1 | Lear 17 | E | C |
| II | 19300445 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| III | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X175 Engine Harness to Transmission Harness (MQE)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/WH | 6380 | II | — | TCC On/Off Solenoid A Control | 1 | 0.5 | GN/WH | 6380 | III | — |
| 2 | 0.5 | GN/GY | 6387 | II | — | Surge Accumulator Solenoid High Side Control | 2 | 0.5 | YE/GN | 4579 | III | — |
| 3 | 0.5 | VT/WH | 422 | II | — | Clutch E Control | 3 | 0.5 | YE/BN | 6404 | III | — |
| 4 | 0.5 | GN/WH | 1530 | II | — | Clutch D Control | 4 | 0.5 | GY/GN | 6403 | III | — |
| 5 | 0.5 | BN | 6400 | II | — | Clutch A Control | 5 | 0.5 | BN | 6400 | III | — |
| 6 | 0.5 | BU | 6401 | II | — | Clutch B Control | 6 | 0.5 | BU | 6401 | III | — |
| 7 | 0.5 | YE/BN | 6210 | II | — | TCC On/Off Solenoid B Control | 7 | 0.5 | YE/BN | 6210 | III | — |
| 8 | 0.5 | WH/GY | 4578 | II | — | Surge Accumulator Solenoid Low Side Control | 8 | 0.5 | WH/GY | 4578 | III | — |

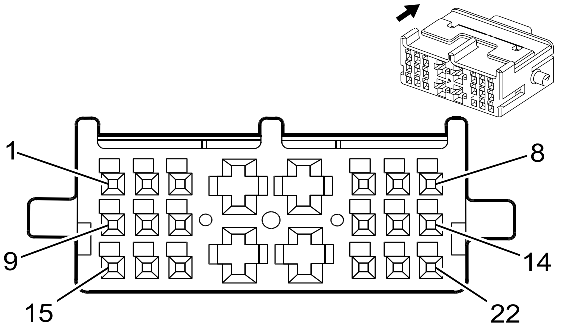
## X175 Engine Harness to Transmission Harness (MQE) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | — | — | — | — | — | Not Occupied | 9 | — | — | — | — | — |
| 10 | 0.5 | GY | 6402 | II | — | Clutch C Control | 10 | 0.5 | GY | 6402 | III | — |
| 11 | 0.5 | BK/BN | 586 | II | — | Transmission Oil Temperature Sensor Low Reference | 11 | 0.5 | BK/BN | 586 | III | — |
| 12 | 0.5 | BN/WH | 585 | II | — | Transmission Oil Temperature Sensor Signal | 12 | 0.5 | BN/WH | 585 | III | — |
| 13 | 0.5 | WH | 4508 | II | — | Transmission Clutch G Control | 13 | 0.5 | WH | 4508 | III | — |
| 14 | 0.5 | WH/BU | 4507 | II | — | Transmission Clutch H Control | 14 | 0.5 | WH/BU | 4507 | III | — |
| 15 - 17 | — | — | — | — | — | Not Occupied | 15 - 17 | — | — | — | — | — |
| 18 | 0.5 | GN/GY | 6387 | I | — | Transmission High Side Driver 1 Signal Driver | 18 | 0.5 | GN/GY | 6387 | III | — |
| 19 | 0.5 | GY/BN | 6388 | I | — | Transmission High Side Driver 2 Signal | 19 | 0.5 | GY/BN | 6388 | III | — |
| 20 | — | — | — | — | — | Not Occupied | 20 | — | — | — | — | — |
| 21 | 0.5 | WH/BK | 5983 | II | — | PRNDL C Signal | 21 | 0.5 | WH/BK | 5983 | III | — |
| 22 | 0.5 | VT/WH | 5981 | II | — | PRNDL A Signal | 22 | 0.5 | VT/WH | 5981 | III | — |
| 23 | 0.5 | GY/WH | 4168 | II | — | PRNDL P Signal | 23 | 0.5 | GY/WH | 4168 | III | — |
| 24 | 0.5 | GY/BU | 6358 | II | — | Output Speed Signal | 24 | 0.5 | GY/BU | 6358 | III | — |
| 25 | 0.5 | YE/GN | 4170 | II | — | Transmission Position Sensor B 9V Reference | 25 | 0.5 | YE/GN | 4170 | III | — |
| 26 | 0.5 | GN/YE | 6353 | II | — | Input Speed Signal | 26 | 0.5 | GN/YE | 6353 | III | — |
| 27 | 0.5 | YE/BU | 4171 | II | — | Transmission Position Sensor A 9V Reference | 27 | 0.5 | YE/BU | 4171 | III | — |
| 28 | 0.5 | GY/BN | 5982 | II | — | PRNDL B Signal | 28 | 0.5 | GY/BN | 5982 | III | — |
| 29 | 0.5 | YE/BU | 4171 | II | — | Transmission Position Sensor A 9V Reference | 29 | 0.5 | YE/BU | 4171 | III | — |
| 30 | 0.5 | BK/GY | 3927 | II | — | IMS Mode Switch Low Reference | 30 | 0.5 | BK/GY | 3927 | III | — |

## X175 Engine Harness to Transmission Harness (MQE) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 31 | 0.5 | YE/GN | 4170 | II | — | Transmission Position Sensor B 9V Reference | 31 | 0.5 | YE/GN | 4170 | III | — |
| 32 | 0.5 | GN/VT | 4510 | II | — | Transmission Intermediate Speed Signal | 32 | 0.5 | GN/VT | 4510 | III | — |
| 33 | — | — | — | — | — | Not Occupied | 33 | — | — | — | — | — |
| 34 | 0.5 | GY/YE | 4169 | II | — | PRNDL S Signal | 34 | 0.5 | GY/YE | 4169 | III | — |
| 35 | 0.5 | WH/GY | 1786 | II | — | Transmission Park/Neutral Signal 1 | 35 | 0.5 | WH/GY | 1786 | III | — |
| 36 | — | — | — | — | — | Not Occupied | 36 | — | — | — | — | — |

# X176 Transmission Case Harness to Transmission Control Harness (MQB)



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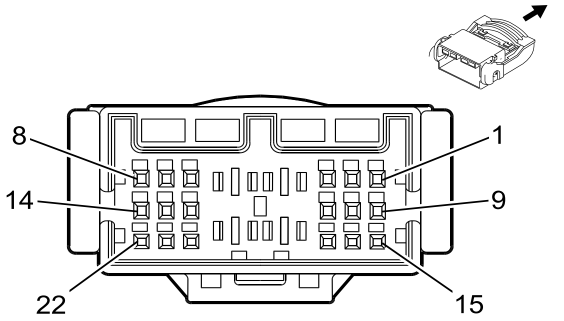

3977770

## Connector Part Information

Harness Type: Transmission Case

OEM Connector: 1897543-1

Service Connector: Service by Harness - See Part Catalog

Description: 22-Way F 0.64 Micro-Quadlock, 2.8 Micro-Power Series (NA)

## Connector Part Information

Harness Type: Transmission Control

OEM Connector: 1897540-1

Service Connector: Service by Harness - See Part Catalog

Description: 22-Way M 0.64 Micro-Quadlock, 2.8 Micro-Power Series (NA)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X176 Transmission Case Harness to Transmission Control Harness (MQB)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | VT | 7819 | I | — | Default Disable Solenoid Control | 1 | 0.5 | VT | 7819 | III | — |
| 2 | 0.5 | GN/OG | 1530 | I | — | Transmission Mainline Pressure Solenoid Control | 2 | 0.5 | GN/OG | 1530 | III | — |
| 3 | 0.5 | GY/BN | 422 | I | — | Torque Converter Clutch Solenoid Control | 3 | 0.5 | GY/BN | 422 | III | — |
| 4 | 0.5 | BN | 6387 | I | — | Transmission High Side Driver 1 Signal Driver | 4 | 0.5 | BN | 6387 | III | — |
| 5 - 12 | — | — | — | — | — | Not Occupied | 5 - 12 | — | — | — | — | — |
| 13 | 0.5 | BU/BN | 586 | I | — | Transmission Oil Temperature Sensor Low Reference | 13 | 0.5 | BU/BN | 586 | III | — |

## X176 Transmission Case Harness to Transmission Control Harness (MQB) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | 0.5 | BN/YE | 585 | I | — | Transmission Oil Temperature Sensor Signal | 14 | 0.5 | BN/YE | 585 | III | — |
| 15 | 0.5 | BU/GN | 6404 | I | — | Clutch E Control | 15 | 0.5 | BU/GN | 6404 | III | — |
| 16 | 0.5 | GN/BN | 6403 | I | — | Clutch D Control | 16 | 0.5 | GN/BN | 6403 | III | — |
| 17 | 0.5 | GY | 6402 | I | — | Clutch C Control | 17 | 0.5 | GY | 6402 | III | — |
| 18 | 0.5 | WH | 6388 | I | — | Transmission High Side Driver 2 Signal | 18 | 0.5 | WH | 6388 | III | — |
| 19 | — | — | — | — | — | Not Occupied | 19 | — | — | — | — | — |
| 20 | 0.5 | BN/WH | 4509 | I | — | Transmission Clutch F Control | 20 | 0.5 | BN/WH | 4509 | III | — |
| 21 | 0.5 | YE/VT | 4507 | I | — | Transmission Clutch H Control | 21 | 0.5 | YE/VT | 4507 | II | — |
| 22 | 0.5 | BU/GY | 4508 | I | — | Transmission Clutch G Control | 22 | 0.5 | BU/GY | 4508 | II | — |

# X176 Transmission Case Harness to Transmission Control Harness (MQE)

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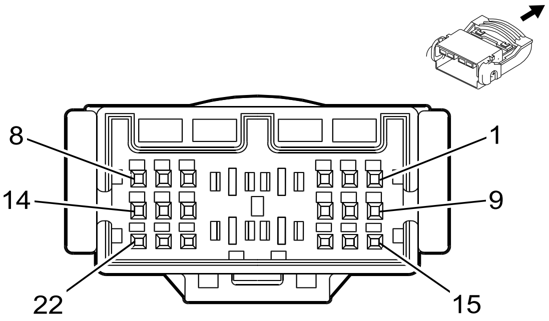


3977770

### Connector Part Information

Harness Type: —

OEM Connector: Not Available

Service Connector: —

Description: —

### Connector Part Information

Harness Type: Transmission Control

OEM Connector: 1897540-1

Service Connector: Service by Harness - See Part Catalog

Description: 22-Way M 0.64 Micro-Quadlock, 2.8 Micro-Power Series (NA)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-5 (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-65B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

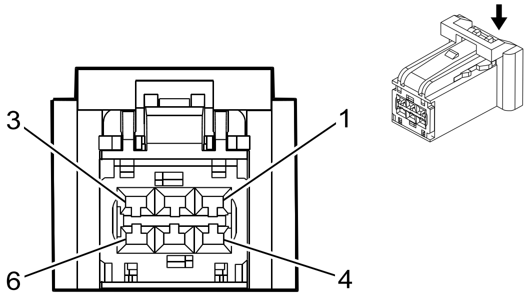
## X176 Transmission Case Harness to Transmission Control Harness (MQE)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | TCC On/Off Solenoid A Control | 1 | 0.5 | GN/WH | 6380 | II | — |
| 2 | — | — | — | — | — | PRNDL A Signal | 2 | 0.5 | VT/WH | 5981 | II | — |
| 3 | — | — | — | — | — | PRNDL B Signal | 3 | 0.5 | GY/BN | 5982 | II | — |
| 4 | — | — | — | — | — | Transmission High Side Driver 1 Signal Driver | 4 | 2.5 | GN/GY | 6387 | I | — |
| 5 | — | — | — | — | — | Transmission Position Sensor A 9V Reference | 5 | 0.5 | YE/BU | 4171 | I | — |
| 6 | — | — | — | — | — | PRNDL S Signal | 6 | 0.5 | GY/YE | 4169 | II | — |
| 7 | — | — | — | — | — | Transmission Clutch H Control | 7 | 0.5 | WH/BU | 4507 | II | — |
| 8 | — | — | — | — | — | Clutch D Control | 8 | 0.5 | GY/GN | 6403 | II | — |

## X176 Transmission Case Harness to Transmission Control Harness (MQE) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | — | — | — | — | — | Transmission Clutch G Control | 9 | 0.5 | WH | 4508 | II | — |
| 10 | — | — | — | — | — | TCC On/Off Solenoid B Control | 10 | 0.5 | YE/ BN | 6210 | II | — |
| 11 | — | — | — | — | — | PRNDL C Signal | 11 | 0.5 | WH/ BK | 5983 | II | — |
| 12 | — | — | — | — | — | Transmission Park/Neutral Signal 1 | 12 | 0.5 | WH/ GY | 1786 | II | — |
| 13 | — | — | — | — | — | Clutch C Control | 13 | 0.5 | GY | 6402 | II | — |
| 14 | — | — | — | — | — | Clutch E Control | 14 | 0.5 | YE/ BN | 6404 | II | — |
| 15 | — | — | — | — | — | Transmission Oil Temperature Sensor Signal | 15 | 0.5 | BK/ BN | 585 | II | — |
| 16 | — | — | — | — | — | Transmission Oil Temperature Sensor Low Reference | 16 | 0.5 | BK/ BN | 586 | II | — |
| 17 | — | — | — | — | — | PRNDL P Signal | 17 | 0.5 | GY/ WH | 4168 | II | — |
| 18 | — | — | — | — | — | Transmission High Side Driver 2 Signal | 18 | 2.5 | GY/ BN | 6388 | I | — |
| 19 | — | — | — | — | — | Transmission Position Sensor B 9V Reference | 19 | 0.5 | YE/ GN | 4170 | I | — |
| 20 | — | — | — | — | — | IMS Mode Switch Low Reference | 20 | 0.5 | BK/ GY | 3927 | II | — |
| 21 | — | — | — | — | — | Clutch A Control | 21 | 0.5 | BN | 6400 | II | — |
| 22 | — | — | — | — | — | Clutch B Control | 22 | 0.5 | BU | 6401 | II | — |

# X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQB)



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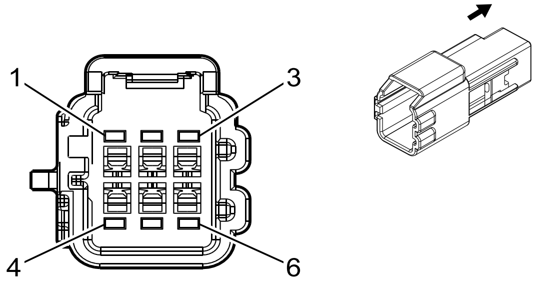


4446774

## Connector Part Information

Harness Type: Transmission Range Control
OEM Connector: 6098-8427
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F

## Connector Part Information

Harness Type: Transmission Control
OEM Connector: 6098-8429
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M

## Terminal Part Information

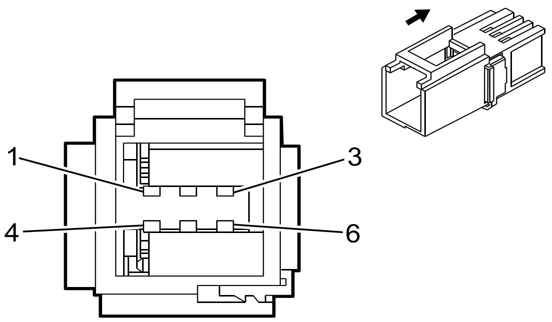
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQB)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | BN | 6387 | I | — | Transmission High Side Driver 1 Signal Driver | 1 | 0.5 | BN | 6387 | II | — |
| 2 | 0.5 | GN/OG | 1530 | I | — | Transmission Mainline Pressure Solenoid Control | 2 | 0.5 | GN/OG | 1530 | II | — |
| 3 | 0.5 | GY/BN | 422 | I | — | Torque Converter Clutch Solenoid Control | 3 | 0.5 | GY/BN | 422 | II | — |
| 4 | 0.5 | VT | 7819 | I | — | Default Disable Solenoid Control | 4 | 0.5 | VT | 7819 | II | — |
| 5 | 0.5 | WH | 6388 | I | — | Transmission High Side Driver 2 Signal | 5 | 0.5 | WH | 6388 | II | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |

# X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQE)

—



3977959

### Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: —
Description: —

### Connector Part Information

Harness Type: Speed Sensor Assembly
OEM Connector: 13955963
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 0.64 II Series (GY)

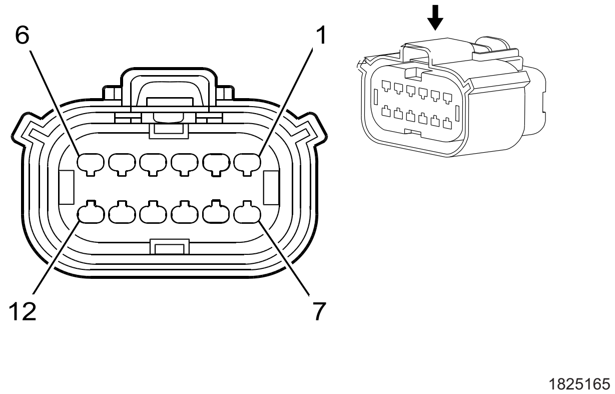
## Terminal Part Information

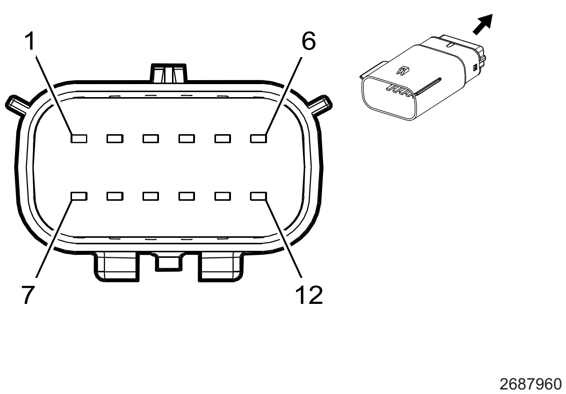
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-65B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X177 Transmission Case Harness to Speed Sensor Assembly Harness (MQE)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Output Speed Signal | 1 | 0.5 | YE | 6358 | I | — |
| 2 | — | — | — | — | — | Transmission Position Sensor B 9V Reference | 2 | 0.5 | RD | 4170 | I | — |
| 3 | — | — | — | — | — | Transmission Position Sensor B 9V Reference | 3 | 0.5 | WH | 4170 | I | — |
| 4 | — | — | — | — | — | Transmission Position Sensor A 9V Reference | 4 | 0.5 | WH | 4171 | I | — |
| 5 | — | — | — | — | — | Input Speed Signal | 5 | 0.5 | GN | 6353 | I | — |
| 6 | — | — | — | — | — | Transmission Intermediate Speed Signal | 6 | 0.5 | BK | 4510 | I | — |

# X182 Chassis Harness to Power Steering Harness (Z45)





## Connector Part Information

Harness Type: Chassis
OEM Connector: 13609715
Service Connector: 19178148
Description: 12-Way F 1.5 Series, Sealed (BK)

## Connector Part Information

Harness Type: Power Steering
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 12-Way M

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300432 | J-35616-2A (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X182 Chassis Harness to Power Steering Harness (Z45)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | 0.5 | BU | 2500 | I | — | High Speed GMLAN Serial Data (+) 1 | 2 | 0.5 | BU | 2500 | II | — |
| 3 | 0.5 | WH | 2501 | I | — | High Speed GMLAN Serial Data (-) 1 | 3 | 0.5 | WH | 2501 | II | — |
| 4 | 0.5 | BU/YE | 6105 | I | — | High Speed GMLAN Serial Data (+) 2 | 4 | 0.5 | BU/YE | 6105 | II | — |
| 5 | 0.5 | WH | 6106 | I | — | High Speed GMLAN Serial Data (-) 2 | 5 | 0.5 | WH | 6106 | II | — |
| 6 - 7 | — | — | — | — | — | Not Occupied | 6 - 7 | — | — | — | — | — |
| 8 | 0.5 | WH/BU | 5986 | I | — | Serial Data Communication Enable | 8 | 0.5 | WH/BU | 5986 | II | — |
| 9 | 0.5 | BU | 2500 | I | — | High Speed GMLAN Serial Data (+) 1 | 9 | 0.5 | BU | 2500 | II | — |
| 10 | 0.5 | WH | 2501 | I | — | High Speed GMLAN Serial Data (-) 1 | 10 | 0.5 | WH | 2501 | II | — |

## X182 Chassis Harness to Power Steering Harness (Z45) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | 0.5 | BU/ YE | 6105 | I | — | High Speed GMLAN Serial Data (+) 2 | 11 | 0.5 | BU/ YE | 6105 | II | — |
| 12 | 0.5 | WH | 6106 | I | — | High Speed GMLAN Serial Data (-) 2 | 12 | 0.5 | WH | 6106 | II | — |

# X183 Power Steering Harness to Power Steering Jumper Harness

—

## Connector Part Information

Harness Type: Power Steering
OEM Connector: 13508902
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F

—

## Connector Part Information

Harness Type: Power Steering Jumper
OEM Connector: 13582138
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M

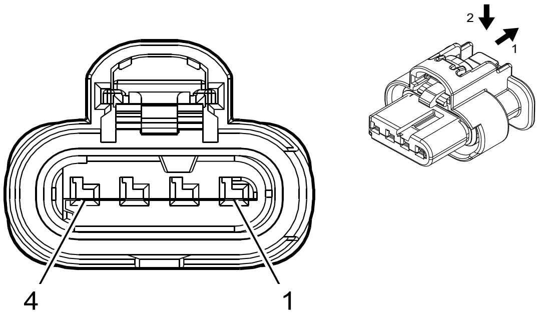
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X183 Power Steering Harness to Power Steering Jumper Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | BK | 350 | I | — | Ground | 1 | — | BK | 350 | II | — |
| 2 | — | RD/VT | 3542 | I | — | Battery Positive Voltage | 2 | — | RD/VT | 3542 | II | — |

# X205 Instrument Panel Harness to Passenger Instrument Panel Air Bag Jumper Harness



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4900699

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35053710
Service Connector: 19371193
Description: 4-Way F 1.2 MCON-CB Series, Sealed (YE)

## Connector Part Information

Harness Type: Passenger Instrument Panel Air Bag Jumper
OEM Connector: 13583527
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M

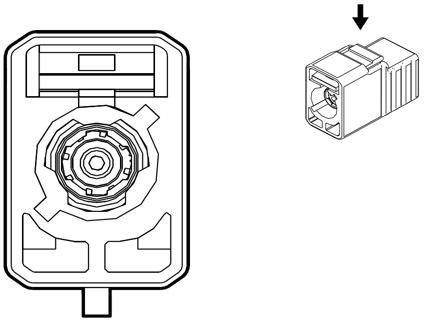
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

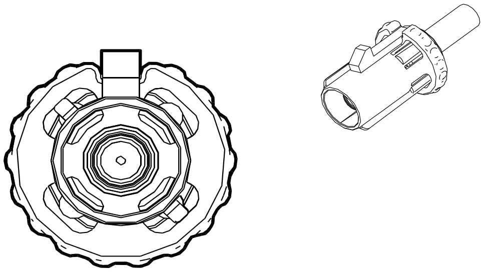
## X205 Instrument Panel Harness to Passenger Instrument Panel Air Bag Jumper Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.35 | YE/OG | 3025 | I | — | Passenger IP Module Stage 1 High Control | 1 | 0.35 | YE/OG | 3025 | II | — |
| 2 | 0.35 | OG/WH | 3024 | I | — | Passenger IP Module Stage 1 Low Control | 2 | 0.35 | OG/WH | 3024 | II | — |
| 3 | 0.35 | GY/OG | 3027 | I | — | Passenger IP Module Stage 2 High Control | 3 | 0.35 | GY/OG | 3027 | II | — |
| 4 | 0.35 | OG/VT | 3026 | I | — | Passenger IP Module Stage 2 Low Control | 4 | 0.35 | OG/VT | 3026 | II | — |

# X209 Instrument Panel Harness to Body Harness (UVB)



3293625



4054894

## Connector Part Information

Harness Type: Body COAX

OEM Connector: 13581690

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type (BU)

## Connector Part Information

Harness Type: Instrument Panel COAX

OEM Connector: 13581676

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type (BU)

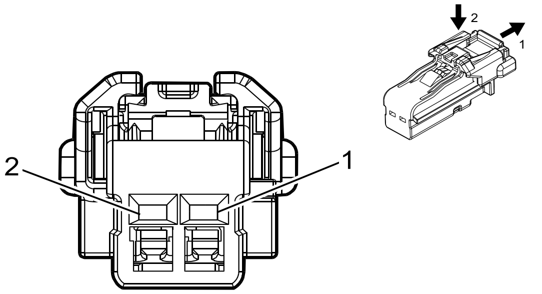
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

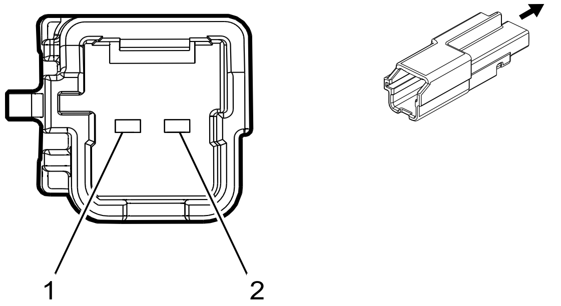
## X209 Instrument Panel Harness to Body Harness (UVB)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax | — | I | — | Coaxial Camera Signal | — | — | Coax | — | I | — |

# X211 Instrument Panel Harness to Body Harness



4115691



4116496

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35026312
Service Connector: 19352066
Description: 2-Way F 1.2 Series (BK)

## Connector Part Information

Harness Type: Body
OEM Connector: 33189233
Service Connector: 19332376
Description: 2-Way M 1.2 Series (BK)

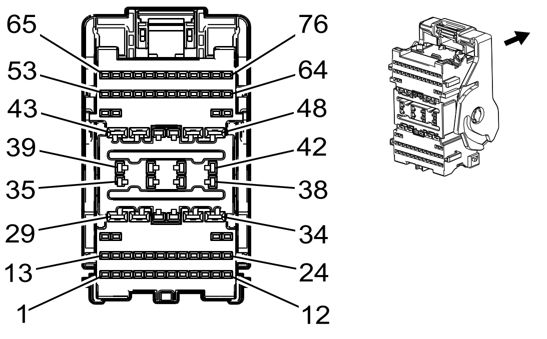
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

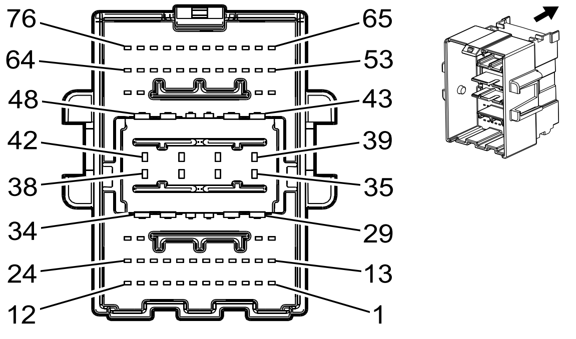
## X211 Instrument Panel Harness to Body Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.35 | BN/BK | 7214 | I | — | Ethernet Bus 6 (-) | 1 | 0.35 | BN/BK | 7214 | II | — |
| 2 | 0.35 | GY/BK | 7215 | I | — | Ethernet Bus 6 (+) | 2 | 0.35 | GY/BK | 7215 | II | — |

## X225 Instrument Panel Harness to Body Harness



3960183



3960526

### Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35142991
Service Connector: 84581287
Description: 76-Way F 1.2, 1.5, 2.8 YESC Series (BK)

### Connector Part Information

Harness Type: Body
OEM Connector: 33303580
Service Connector: 19355187
Description: 76-Way M 1.2 MCON-CB, 1.5, 2.8 YESC Series (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575708 | J-35616-2A (GY) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| II | 13578891 | J-35616-2A (GY) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| III | 13578893 | J-35616-4A (PU) | J-38125-11A | 7116-4110-02 | Yazaki 9 | E | C |
| IV | 13580025 | J-35616-4A (PU) | J-38125-11A | 7116-4111-02 | Yazaki 9 | E | A |
| V | 13582232 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VI | 19300649 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VII | 19300649 | J-35616-4A (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VIII | 19301752 | J-35616-4A (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IX | 19301767 | J-35616-2A (GY) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| X | 19333323 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| XI | 19367551 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| XII | 19352074 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| XIII | 19352075 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| XIV | 19352417 | J-35616-3 (GY) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| XV | 19352418 | J-35616-3 (GY) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| XVI | 19354072 | J-35616-5 (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## Terminal Part Information (cont'd)

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| XVII | 19355729 | J-35616-5 (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| XVIII | 84616651 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## X225 Instrument Panel Harness to Body Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | — | — | Not Occupied | 1 - 2 | — | — | — | — | — |
| 3 | 0.35 | BU/YE | 5361 | X | — | Brake Apply Sensor Signal | 3 | 0.35 | BU/YE | 5361 | XII | — |
| 4 | 0.35 | BK/BN | 5360 | X | — | Brake Apply Sensor Low Reference | 4 | 0.35 | BK/BN | 5360 | XII | — |
| 5 | 0.35 | WH | 5359 | X | — | Brake Apply Sensor Control | 5 | 0.35 | WH | 5359 | XII | — |
| 6 | 0.35 | BK/GY | 2204 | X | — | Enhanced Driver Mode 1 Switch Low Reference | 6 | 0.35 | BK/GY | 2204 | XII | — |
| 7 | 0.35 | GY | 4109 | X | — | Driver Mode Switch 5V Reference | 7 | 0.35 | GY | 4109 | XII | — |
| 8 | 0.35 | WH/BN | 2203 | X | — | Enhanced Driver Mode 2 Switch Signal | 8 | 0.35 | WH/BN | 2203 | XII | — |
| 9 | 0.35 | YE | 6817 | X | — | LED Backlight Dimming Control | 9 | 0.35 | YE | 6817 | XII | — |
| 10 | 0.35 | GN | 5060 | X | — | Low Speed GMLAN Serial Data | 10 | 0.35 | GN | 5060 | XII | — |
| 11 | 0.35 | VT/GY | 1630 | X | — | Steering Column Key Cylinder Lock Solenoid Control | 11 | 0.35 | VT/GY | 1630 | XII | — |
| 12 | 0.35 | VT/BK | 3 | X | — | Run/Crank Ignition 1 Voltage | 12 | 0.35 | VT/BK | 3 | XII | — |
| 13 | 0.35 | GN/BK | 3558 | X | — | Passive Start Switch Signal 2 | 13 | 0.35 | GN/BK | 3558 | XII | — |
| 14 | 0.35 | VT/YE | 4 | X | — | Accessory Ignition Voltage | 14 | 0.35 | VT/YE | 4 | XII | — |
| 15 | 0.35 | OG/VT | 3021 | V | — | Steering Wheel Module Stage 1 High Control | 15 | 0.35 | OG/VT | 3021 | XVIII | — |
| 16 | 0.35 | BN/OG | 3020 | V | — | Steering Wheel Module Stage 1 Low Control | 16 | 0.35 | BN/OG | 3020 | XVIII | — |

## X225 Instrument Panel Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | 0.35 | OG/GN | 3023 | V | — | Steering Wheel Module Stage 2 High Control | 17 | 0.35 | OG/GN | 3023 | XVIII | — |
| 18 | 0.35 | WH/OG | 3022 | V | — | Steering Wheel Module Stage 2 Low Control | 18 | 0.35 | WH/OG | 3022 | XVIII | — |
| 19 | 0.35 | GN/BU | 2733 | X | — | Local Interconnect Network Bus 33 | 19 | 0.35 | GN/BU | 2733 | XII | — |
| 20 | 0.35 | YE/WH | 1690 | X | — | Automatic Day/Night Mirror Signal | 20 | 0.35 | YE/WH | 1690 | XII | — |
| 21 | 0.35 | BK/YE | 1691 | X | — | Automatic Day/Night Mirror Low Reference | 21 | 0.35 | BK/YE | 1691 | XII | — |
| 22 | 0.35 | GN | 4512 | X | — | Wireless Charging System Charge Indicator Control | 22 | 0.35 | GN | 4512 | XII | — |
| 23 | 0.35 | GN/WH | 4115 | X | — | Local Interconnect Network Serial Data Bus 15 | 23 | 0.35 | GN/WH | 4115 | XII | — |
| 24 | 0.35 | BU/YE | 6105 | X | — | High Speed GMLAN Serial Data (+) 2 | 24 | 0.5 | BU/YE | 6105 | XII | — |
| 25 | 0.35 | WH | 6106 | X | — | High Speed GMLAN Serial Data (-) 2 | 25 | 0.5 | WH | 6106 | XII | — |
| 26 | 0.35 | BN/WH | 419 | X | — | Check Engine Indicator Control | 26 | 0.35 | BN/WH | 419 | XII | — |
| 27 | 0.35 | GN/GY | 3277 | X | — | Vehicle Anti-Theft System Immobilizer Low Reference | 27 | 0.35 | GN/GY | 3277 | XII | — |
| 28 | 0.35 | WH/BU | 5986 | X | — | Serial Data Communication Enable | 28 | 0.35 | WH/BU | 5986 | XII | — |
| 29 | — | — | — | — | — | Not Occupied | 29 | — | — | — | — | — |
| 30 | 0.35 | YE/WH | 816 | III | — | Brake Transmission Shift Interlock Solenoid Control | 30 | 0.35 | YE/WH | 816 | XVIII | — |
| 31 | 0.35 | WH | 2501 | II | — | High Speed GMLAN Serial Data (-) 1 | 31 | 0.5 | WH | 2501 | XIV | — |
| 32 | 0.35 | BU | 2500 | II | — | High Speed GMLAN Serial Data (+) 1 | 32 | 0.5 | BU | 2500 | XIV | — |
| 33 | 0.75 | BU/VT | 1857 | IV | — | Left Front Midrange Speaker Control (+) | 33 | 0.75 | BU/VT | 1857 | XVII | — |

## X225 Instrument Panel Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 | 0.75 | BU/BN | 1957 | IV | — | Left Front Midrange Speaker (-) Low Reference | 34 | 0.75 | BU/BN | 1957 | XVII | — |
| 35 | 0.5 | WH/BN | 6815 | IX | — | Inadvertent Power Control | 35 | 0.5 | WH/BN | 6815 | XIV | — |
| 36 | 0.35 | GN/WH | 1932 | II | — | Shift Select Switch Park Signal | 36 | 0.35 | GN/WH | 1932 | XIV | — |
| 37 - 38 | — | — | — | — | — | Not Occupied | 37 - 38 | — | — | — | — | — |
| 39 | 0.35 | BU/GY | 553 | II | — | Shift Select Switch Performance Signal | 39 | 0.35 | BU/GY | 553 | XIV | — |
| 40 - 41 | — | — | — | — | — | Not Occupied | 40 - 41 | — | — | — | — | — |
| 42 | 0.35<br>0.35 | BU/YE<br>BU/YE | 6844<br>7176 | I<br>I | JHD<br>-JHD | ABS/TCS Hill Descent Control Switch Signal<br>All Windows Open Switch Signal | 42 | 0.35<br>0.35 | BU/YE<br>BU/YE | 6844<br>7176 | XIV<br>XIV | JHD<br>-JHD |
| 43 | — | — | — | — | — | Not Occupied | 43 | — | — | — | — | — |
| 44 | 0.35 | Bare | 514 | VII | — | Low Reference | 44 | 0.35 | Bare | 514 | XVI | — |
| 45 | 0.75 | BK | 5683 | I | — | 120 V AC Phase A | 45 | 0.75 | BK | 5683 | XV | — |
| 46 | 0.75 | RD | 5684 | I | — | 120 V AC Phase B | 46 | 0.75 | RD | 5684 | XV | — |
| 47 | 0.75 | BN/BU | 118 | VIII | — | Left Front Speaker Signal (-) 1 | 47 | 0.75 | BN/BU | 118 | XVII | — |
| 48 | 0.75 | BU | 201 | VIII | — | Left Front Speaker Control (+) 1 | 48 | 0.75 | BU | 201 | XVII | — |
| 49 | 0.35 | BU/BN | 7573 | X | — | Electric Variable Displacement Supply | 49 | 0.35 | BU/BN | 7573 | XII | — |
| 50 | 0.35 | BU/YE | 7574 | X | — | Electric Variable Displacement Control | 50 | 0.35 | BU/YE | 7574 | XII | — |
| 51 | 0.5 | GN | 199 | VI | U95/UQF | Left Rear Speaker Control (+) | 51 | 0.5 | GN | 199 | XII | U95/UQF |
| 52 | 0.5 | GN/BK | 116 | VI | U95/UQF | Left Rear Speaker Signal (-) | 52 | 0.5 | GN/BK | 116 | XII | U95/UQF |
| 53 | 0.35 | GN/BN | 507 | X | — | Wait To Start Indicator Control | 53 | 0.35 | GN/BN | 507 | XII | — |

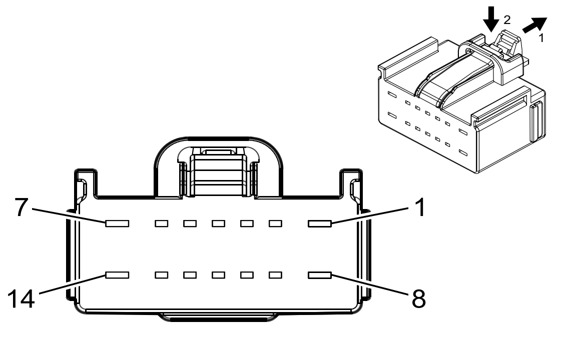
## X225 Instrument Panel Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 54 | 0.35 | WH/BN | 7296 | X | — | Right Minor Endgate Ajar Signal | 54 | 0.35 | WH/BN | 7296 | XII | — |
| 55 | 0.35 | YE/BU | 7295 | X | — | Left Minor Endgate Ajar Signal | 55 | 0.35 | YE/BU | 7295 | XII | — |
| 56 | 0.35 | GN/VT | 7533 | X | — | Local Interconnect Network Serial Data Bus 11 | 56 | 0.35 | GN/VT | 7533 | XII | — |
| 57 | 0.35 | GN/YE | 2731 | X | — | Local Interconnect Network Bus 31 | 57 | 0.35 | GN/YE | 2731 | XII | — |
| 58 | — | — | — | — | — | Not Occupied | 58 | — | — | — | — | — |
| 59 | 0.35 | BN | 7754 | X | — | AC Power Outlet Enable | 59 | 0.5 | BN | 7754 | XIII | — |
| 60 | 0.35 | GN/VT | 1601 | X | — | Steering Column Lock Signal | 60 | 0.35 | GN/VT | 1601 | XII | — |
| 61 | 0.35 | BK/GY | 3559 | X | — | Passive Start Switch 2 Low Reference | 61 | 0.35 | BK/GY | 3559 | XII | — |
| 62 | — | — | — | — | — | Not Occupied | 62 | — | — | — | — | — |
| 63 | 0.35 | BU/YE | 6105 | X | — | High Speed GMLAN Serial Data (+) 2 | 63 | 0.5 | BU/YE | 6105 | XII | — |
| 64 | 0.35 | WH | 6106 | X | — | High Speed GMLAN Serial Data (-) 2 | 64 | 0.5 | WH | 6106 | XII | — |
| 65 | — | — | — | — | — | Not Occupied | 65 | — | — | — | — | — |
| 66 | 0.5 | BN/BK | 3552 | VI | — | Passive Start Interior Antenna 1 Signal Hi | 66 | 0.35 | BN/BK | 3552 | XII | — |
| 67 | 0.5 | WH | 3553 | VI | — | Passive Start Interior Antenna 1 Signal Lo | 67 | 0.35 | WH | 3553 | XII | — |
| 68 | 0.35 | YE/VT | 6191 | X | — | Power Sliding Window Switch Open Signal | 68 | 0.35 | YE/VT | 6191 | XII | — |
| 69 | 0.35 | WH | 6192 | X | — | Power Sliding Window Switch Close Signal | 69 | 0.35 | WH | 6192 | XII | — |
| 70 | 0.35 | GY/BK | 3276 | X | — | Vehicle Anti-Theft System Immobilizer Control | 70 | 0.35 | GY/BK | 3276 | XII | — |
| 71 | — | — | — | — | — | Not Occupied | 71 | — | — | — | — | — |
| 72 | 0.35 | BN | 1560 | X | — | Neutral Indicator Control | 72 | 0.35 | BN | 1560 | XII | — |

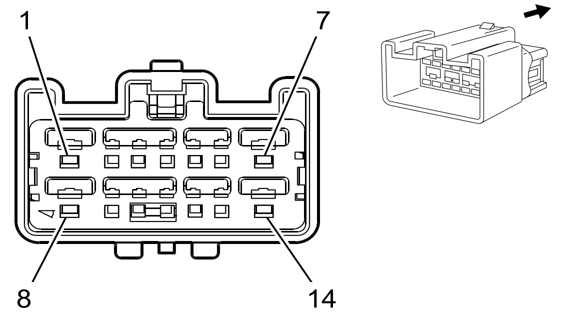
## X225 Instrument Panel Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 73 | — | — | — | — | — | Not Occupied | 73 | — | — | — | — | — |
| 74 | 0.35 | BU/BN | 6807 | X | — | DC To AC Inverter Control | 74 | 0.35 | BU/BN | 6807 | XII | — |
| 75 | 0.35 | VT | 185 | X | — | Low Washer Fluid Indicator Control | 75 | 0.35 | VT | 185 | XII | — |
| 76 | 0.5 | BN/WH | 7462 | XI | — | Running Boards Disable Signal | 76 | 0.35 | BN/WH | 7462 | XII | — |

# X241 Body Harness to Power Inverter Module Jumper Harness (KI5)



4934172



1283905

### Connector Part Information

Harness Type: Body
OEM Connector: 33366376
Service Connector: 13513605
Description: 14-Way F 1.5, 2.8 Series (GY)

### Connector Part Information

Harness Type: Rear Body Extension
OEM Connector: 10846900
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way M 1.5, 2.8 Series (L-GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575708 | J-35616-2A (GY) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| II | 13578891 | J-35616-2A (GY) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| III | 13580025 | J-35616-4A (PU) | J-38125-11A | 7116-4111-02 | Yazaki 9 | E | A |
| IV | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| V | Not Required | J-35616-5 (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X241 Body Harness to Power Inverter Module Jumper Harness (KI5)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BK | 5683 | III | — | 120 V AC Phase A | 1 | 0.75 | BK | 5683 | V | — |
| 2 | — | — | — | — | — | Not Occupied | 2 | — | — | — | — | — |
| 3 | 0.35 | VT/YE | 5985 | II | — | Accessory Wakeup Serial Data | 3 | 0.35 | VT/YE | 5985 | IV | — |
| 4 | 0.35 | WH/GN | 4628 | II | — | DC/AC Inverter Relay Control | 4 | 0.35 | WH/GN | 4628 | IV | — |
| 5 | 0.35 | BU/BN | 6807 | II | — | DC To AC Inverter Control | 5 | 0.35 | BU/BN | 6807 | IV | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |
| 7 | 0.75 | BK/WH | 2264 | III | — | 120 VAC Phase A 2 | 7 | 0.75 | BK/WH | 2264 | V | — |

## X241 Body Harness to Power Inverter Module Jumper Harness (KI5) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8 | 0.75 | RD | 5684 | III | — | 120 V AC Phase B | 8 | 0.75 | RD | 5684 | V | — |
| 9 | 0.35 | Bare | 514 | II | — | Low Reference | 9 | 0.35 | Bare | 514 | IV | — |
| 10 | 0.35 | GN | 5060 | II | — | Low Speed GMLAN Serial Data | 10 | 0.35 | GN | 5060 | IV | — |
| 11 | — | — | — | — | — | Not Occupied | 11 | — | — | — | — | — |
| 12 | 0.75 | GN/ BN | 2266 | I | — | DC To AC Inverter Control 2 | 12 | 0.75 | GN/ BN | 2266 | IV | — |
| 13 | 0.35 | Bare | 2257 | II | — | Drain Wire | 13 | 0.35 | Bare | 2257 | IV | — |
| 14 | 0.75 | RD/ WH | 2265 | III | — | 120 VAC Phase B 2 | 14 | 0.75 | RD/ WH | 2265 | V | — |

# X250 Auxiliary Heater Jumper Harness to Body Harness (C32)

—

## Connector Part Information

Harness Type: —
OEM Connector: Not Available
Service Connector: —
Description: —

—

## Connector Part Information

Harness Type: Body
OEM Connector: 35134697
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way M

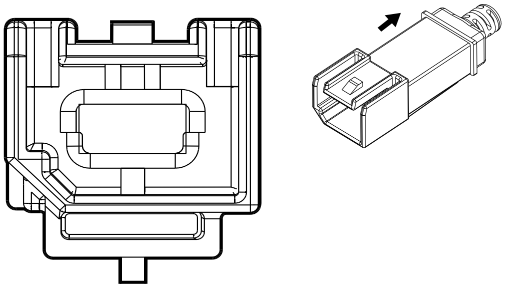
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-21 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

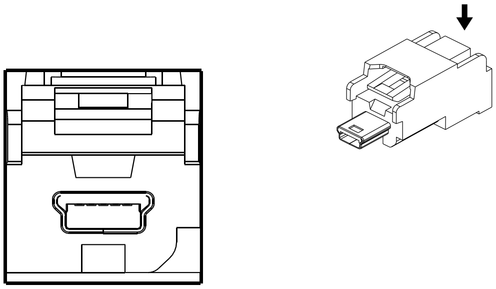
## X250 Auxiliary Heater Jumper Harness to Body Harness (C32)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | — | — | — | — | — | Battery Positive Voltage | 2 | 10 | RD/GY | 642 | I | — |

# X255 USB Receptacle Jumper Harness to Floor Console Harness ((IOS/IOT)+D07)



2830616



3028808

## Connector Part Information

Harness Type: USB Receptacle Jumper USB

OEM Connector: 13584921

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type

## Connector Part Information

Harness Type: Floor Console USB

OEM Connector: 13584764

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X255 USB Receptacle Jumper Harness to Floor Console Harness ((IOS/IOT)+D07)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | USB | — | I | — | USB Serial Data | — | — | USB | — | I | — |

## X256 Headliner Harness to Instrument Panel Harness

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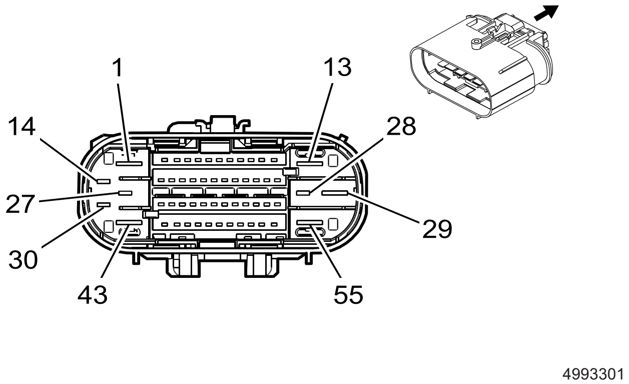


### Connector Part Information

Harness Type: Headliner
OEM Connector: 35141318
Service Connector: 84616678
Description: 55-Way F

### Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35027621
Service Connector: 19371179
Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 19300649 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| II | 19301757 | J-35616-40 (BU) | J-38125-556 | 1241408-1 | Lear 28 | A | B |
| III | 19333088 | J-35616-35 (VT) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | 19371217 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| V | 13578881 | J-35616-5 (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VI | 19329756 | J-35616-32 (OR) | J-38125-36 | Not Available | Not Available | Not Available | Not Available |
| VII | 19352074 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VIII | 19352075 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

### X256 Headliner Harness to Instrument Panel Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1050 | II | — | Ground | 1 | 2.5 | BK | 1050 | VI | — |
| 2 | 1.5 | BK | 9003 | IV | — | Not Used | 2 | 1 | BK | 9000 | VIII | — |
| 3 | 0.35 | BU/BK | 7044 | I | — | Microphone (-) Low Reference | 3 | 0.35 | BU/BK | 7044 | VII | — |
| 4 | 0.35 | VT/YE | 7043 | I | — | Microphone (+) Signal | 4 | 0.35 | VT/YE | 7043 | VII | — |
| 5 | 0.35 | BU | 655 | I | — | Cellular Telephone Microphone Signal | 5 | 0.35 | BU | 655 | VII | — |

## X256 Headliner Harness to Instrument Panel Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 0.35 | BK/ BN | 654 | I | — | Cellular Telephone Microphone Low Reference | 6 | 0.35 | BK/ BN | 654 | VII | — |
| 7 | 0.35 | BK | 1782 | I | — | Low Reference | 7 | 0.35 | BK | 1782 | VII | — |
| 8 | 0.35 | WH/ GY | 3936 | I | — | High Speed GMLAN Serial Data (-) 8 | 8 | 0.35 | WH/ GY | 3936 | VII | — |
| 9 | 0.35 | BU/ GY | 3935 | I | — | High Speed GMLAN Serial Data (+) 8 | 9 | 0.35 | BU/ GY | 3935 | VII | — |
| 10 | 0.35 | GY | 157 | I | — | Interior Lamp Control | 10 | 0.35 | GY | 157 | VII | — |
| 11 | 0.35 | BK/ WH | 1851 | I | — | Signal Ground | 11 | 0.35 | BK/ WH | 1851 | VII | — |
| 12 | 1.5 | BK | 9003 | IV | — | Not Used | 12 | 1 | BK | 9000 | VIII | — |
| 14 | 2.5 | RD/ GN | 3140 | III | — | Battery Positive Voltage | 14 | 2.5 | RD/ GN | 3140 | V | — |
| 15 | 0.5 | WH/ VT | 1430 | I | — | Exterior Courtesy Lamp Control | 15 | 0.5 | WH/ VT | 1430 | VII | — |
| 16 | 0.35 | WH/ BU | 5986 | I | — | Serial Data Communication Enable | 16 | 0.35 | WH/ BU | 5986 | VII | — |
| 17 | 0.35 | BK/ YE | 1691 | I | — | Automatic Day/Night Mirror Low Reference | 17 | 0.35 | BK/ YE | 1691 | VII | — |
| 18 | 0.35 | GY/ GN | 7565 | I | — | Windscreen Temp Sensor Signal | 18 | 0.35 | GY/ GN | 7565 | VII | — |
| 19 | 0.5 | WH/ BN | 6815 | I | — | Inadvertent Power Control | 19 | 0.5 | WH/ BN | 6815 | VII | — |
| 20 | 0.35 | GN | 2308 | I | — | Passenger Air Bag Off Indicator Control | 20 | 0.35 | GN | 2308 | VII | — |
| 21 | 0.35 | BU | 2307 | I | — | Passenger Air Bag On Indicator Control | 21 | 0.35 | BU | 2307 | VII | — |
| 22 | 0.35 | YE/ WH | 1690 | I | — | Automatic Day/Night Mirror Signal | 22 | 0.35 | YE/ WH | 1690 | VII | — |
| 23 | 0.35 | WH | 6192 | I | — | Power Sliding Window Switch Close Signal | 23 | 0.35 | WH | 6192 | VII | — |
| 24 | 0.35 | GY | 156 | I | — | Courtesy Lamp Switch Signal | 24 | 0.35 | GY | 156 | VII | — |
| 25 | 0.35 | GN | 5060 | I | — | Low Speed GMLAN Serial Data | 25 | 0.35 | GN | 5060 | VII | — |

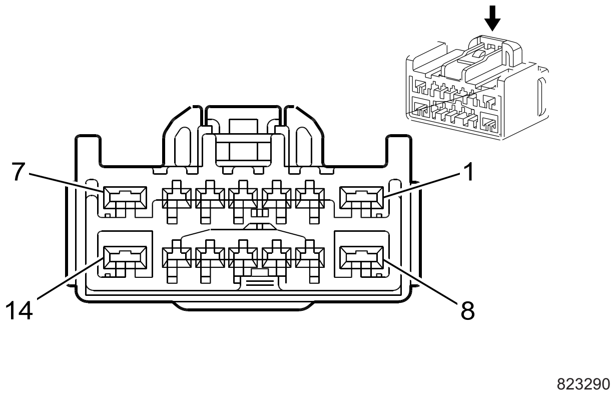
## X256 Headliner Harness to Instrument Panel Harness (cont'd)

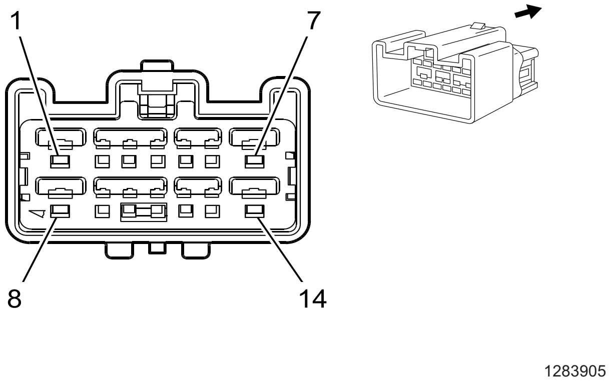
| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 0.35 | YE/ BU | 3197 | I | — | Humidity Temperature Sensor Signal | 26 | 0.35 | YE/ BU | 3197 | VII | — |
| 30 | 2.5 | GN/ BU | 5989 | III | — | Emergency Lamp Relay Contact Control | 30 | 2.5 | GN/ BU | 5989 | V | — |
| 31 | 0.35 | BN/ WH | 2517 | I | — | Keypad Red LED Control | 31 | 0.35 | BN/ WH | 2517 | VII | — |
| 32 | 0.35 | YE/ VT | 2516 | I | — | Keypad Green LED Control | 32 | 0.35 | YE/ VT | 2516 | VII | — |
| 33 | 0.35 | GN/ WH | 24 | I | — | Backup Lamp Control | 33 | 0.35 | GN/ WH | 24 | VII | — |
| 34 | 0.35 | GY/ GN | 328 | I | — | Interior Lamp Defeat Switch Signal | 34 | 0.35 | GY/ GN | 328 | VII | — |
| 35 | 0.35 | BU/ GY | 4672 | I | — | Dome Lamp Off Indicator Control | 35 | 0.35 | BU/ GY | 4672 | VII | — |
| 37 | 0.35 | GN/ WH | 2514 | I | — | Keypad Signal | 37 | 0.35 | GN/ WH | 2514 | VII | — |
| 38 | 0.35 | GN/ BK | 2515 | I | — | Keypad Control | 38 | 0.35 | GN/ BK | 2515 | VII | — |
| 39 | 0.5<br>0.5 | VT/ WH<br>VT/ GY | 5065<br>1054 | I<br>I | EXTENDED/ CREW CAB<br>REGULAR CAB | Stop Lamp Control<br>Stop Lamp Control | 39 | 0.35 | VT/ GY | 1054 | VII | — |
| 40 | 0.35 | WH | 3152 | I | — | Lane Departure Warning Indicator Control | 40 | 0.35 | WH | 3152 | VII | — |
| 41 | 0.35 | GY/ WH | 3153 | I | — | Lane Departure Warning Disable Switch Signal | 41 | 0.35 | GY/ WH | 3153 | VII | — |
| 42 | 0.35 | YE | 6817 | I | — | LED Backlight Dimming Control | 42 | 0.35 | YE | 6817 | VII | — |
| 44 | 1.5 | BK | 9003 | IV | — | Not Used | 44 | 1 | BK | 9000 | VIII | — |
| 45 | 0.35 | WH | 6816 | I | — | Indicator Dimming Control | 45 | 0.35 | WH | 6816 | VII | — |
| 46 | 0.35 | YE/ RD | 597 | I | — | 5V Reference | 46 | 0.35 | YE/ RD | 597 | VII | — |
| 47 | 0.35 | VT/ GN | 7558 | I | — | LED Ambient Lighting Control 2 | 47 | 0.35 | VT/ GN | 7558 | VII | — |
| 48 | 0.35 | VT/ WH | 5234 | I | — | Passenger Seat Belt Indicator Control | 48 | 0.35 | VT/ WH | 5234 | VII | — |

## X256 Headliner Harness to Instrument Panel Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 49 | 0.35 | BK/BU | 7566 | I | — | Humidity/Windscreen Temp Sensor Low Reference | 49 | 0.35 | BK/BU | 7566 | VII | — |
| 50 | 0.35 | GN/BN | 6132 | I | — | Local Interconnect Network Serial Data Bus 1 | 50 | 0.35 | GN/BN | 6132 | VII | — |
| 51 | 0.35 | GY/BU | 7564 | I | — | Humidity Sensor Signal | 51 | 0.35 | GY/BU | 7564 | VII | — |
| 52 | 0.35 | YE/VT | 6191 | I | — | Power Sliding Window Switch Open Signal | 52 | 0.35 | YE/VT | 6191 | VII | — |
| 54 | 1.5 | BK | 9003 | IV | — | Not Used | 54 | 1 | BK | 9000 | VIII | — |

# X260 Auxiliary Instrument Panel Harness to Instrument Panel Harness





## Connector Part Information

Harness Type: Auxiliary Instrument Panel
OEM Connector: 10847017
Service Connector: Service by Harness - See Part Catalog
Description: 14-Way F 1.5, 2.8 Series (L-GY)

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 10846900
Service Connector: 88956523
Description: 14-Way M 1.5, 2.8 Series (L-GY)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | 13575818 | J-35616-3 (GY) | J-38125-553 | Not Available | Not Available | Not Available | Not Available |
| IV | 13575824 | J-35616-5 (PU) | J-38125-11A | 7114-4112-02 | Yazaki 9 | C | D |

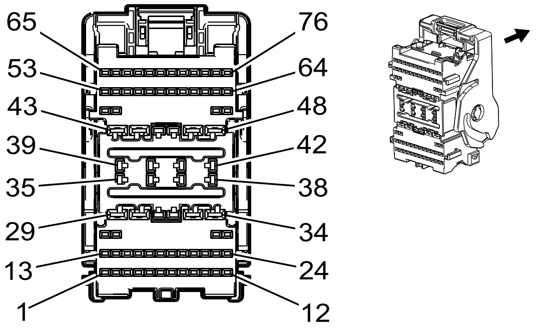
## X260 Auxiliary Instrument Panel Harness to Instrument Panel Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | BK | 1250 | II | -JL1+Z82 | Ground | 1 | 2 | BK | 1250 | IV | — |
| 2 | — | — | — | — | — | Not Occupied | 2 | — | — | — | — | — |
| 3 | 0.35 | YE | 6817 | I | — | LED Backlight Dimming Control | 3 | 0.5 | YE | 6817 | III | — |
| 4 | 0.35 | BK | 6821 | I | — | Surveillance Switch Signal | 4 | 0.35 | WH/VT | 6821 | III | — |
| 5 | 0.5 | WH/BU | 3691 | I | — | Trailer Brake Apply Signal | 5 | 0.5 | WH/BU | 3691 | III | — |
| 6 | — | — | — | — | — | Accessory Ignition Voltage | 6 | 0.35 | VT/YE | 43 | III | — |
| 7 | 2 | RD/VT | 1242 | II | — | Battery Positive Voltage | 7 | 2 | RD/VT | 1242 | IV | — |
| 8 | 2.5 | GN/BU | 5989 | II | — | Emergency Lamp Relay Contact Control | 8 | 2.5 | GN/BU | 5989 | IV | — |

## X260 Auxiliary Instrument Panel Harness to Instrument Panel Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | — | — | — | — | — | Out of Park Signal | 9 | 0.35 | YE | 6812 | III | — |
| 10 | — | — | — | — | — | Vehicle Speed Signal | 10 | 0.35 | GN/GY | 817 | III | — |
| 11 | 0.35 | WH | 6816 | I | — | Indicator Dimming Control | 11 | 0.35 | WH | 6816 | III | — |
| 12 | — | — | — | — | — | Not Occupied | 12 | — | — | — | — | — |
| 13 | 0.5 | VT/GN | 39 | I | — | Run/Crank Ignition 1 Voltage | 13 | 0.35 | VT/WH | 239 | III | — |
| 14 | 2 | BU | 47 | II | — | Trailer Auxiliary Control | 14 | 2 | BU | 47 | IV | — |

# X275 Instrument Panel Harness to Body Harness



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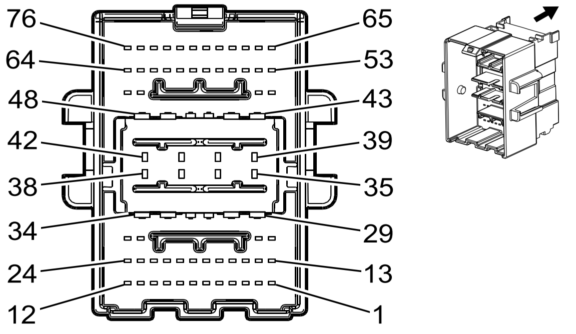


3960526

## Connector Part Information

Harness Type: Instrument Panel
OEM Connector: 35142991
Service Connector: 84581287
Description: 76-Way F 1.2, 1.5, 2.8 YESC Series (BK)

## Connector Part Information

Harness Type: Body
OEM Connector: 33303580
Service Connector: 19355187
Description: 76-Way M 1.2 MCON-CB, 1.5, 2.8 YESC Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13575708 | J-35616-2A (GY) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| II | 13578891 | J-35616-2A (GY) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| III | 13580025 | J-35616-4A (PU) | J-38125-11A | 7116-4111-02 | Yazaki 9 | E | A |
| IV | 13582232 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| V | 13582322 | J-35616-4A (PU) | J-38125-11A | 7116-4110-02 | Yazaki 9 | E | C |
| VI | 19300649 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VII | 19301752 | J-35616-4A (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VIII | 19301767 | J-35616-2A (GY) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IX | 19333323 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| X | 19367551 | J-35616-16 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| XI | 13575818 | J-35616-3 (GY) | J-38125-553 | Not Available | Not Available | Not Available | Not Available |
| XII | 19352074 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| XIII | 19352075 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| XIV | 19352417 | J-35616-3 (GY) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| XV | 19352418 | J-35616-3 (GY) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| XVI | 19355729 | J-35616-5 (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## Terminal Part Information (cont'd)

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| XVII | 19355731 | J-35616-5 (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| XVIII | 19369872 | J-35616-5 (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## X275 Instrument Panel Harness to Body Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | 0.5 | RD/WH | 3440 | VI | — | Battery Positive Voltage | 2 | 0.5 | RD/WH | 3440 | XII | — |
| 3 | 0.5 | BN/WH | 3895 | X | — | Roof Rail Air Bag Defeat Switch Low Reference | 3 | 0.5 | BN/WH | 3895 | XII | — |
| 4 | 0.5 | BU/WH | 3119 | X | — | Roof Rail Air Bag Defeat Switch Signal | 4 | 0.5 | BU/WH | 3119 | XII | — |
| 5 | 0.35 | GY/GN | 2555 | IX | — | Rear Park Assist Disable Signal | 5 | 0.35 | GY/GN | 2555 | XII | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |
| 7 | 0.35 | VT/WH | 5234 | IX | — | Passenger Seat Belt Indicator Control | 7 | 0.35 | VT/WH | 5234 | XII | — |
| 8 | 0.35 | BU | 2307 | IX | — | Passenger Air Bag On Indicator Control | 8 | 0.35 | BU | 2307 | XII | — |
| 9 | 0.35 | BU/GY | 4672 | IX | — | Dome Lamp Off Indicator Control | 9 | 0.35 | BU/GY | 4672 | XII | — |
| 10 | 0.35 | GY | 156 | IX | — | Courtesy Lamp Switch Signal | 10 | 0.35 | GY | 156 | XII | — |
| 11 | 0.35 | GN/BU | 761 | IX | — | Blower Speed Feedback Signal | 11 | 0.35 | GN/BU | 761 | XII | — |
| 12 | 0.35 | GN/GY | 817 | IX | — | Vehicle Speed Signal | 12 | 0.35 | GN/GY | 817 | XII | — |
| 13 | 0.35 | GN | 2308 | IX | — | Passenger Air Bag Off Indicator Control | 13 | 0.35 | GN | 2308 | XII | — |
| 14 | — | — | — | — | — | Not Occupied | 14 | — | — | — | — | — |
| 15 | 0.35 | YE/OG | 3025 | IV | — | Passenger IP Module Stage 1 High Control | 15 | 0.35 | YE/OG | 3025 | XI | — |
| 16 | 0.35 | OG/WH | 3024 | IV | — | Passenger IP Module Stage 1 Low Control | 16 | 0.35 | OG/WH | 3024 | XI | — |

## X275 Instrument Panel Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | 0.35 | GY/OG | 3027 | IV | — | Passenger IP Module Stage 2 High Control | 17 | 0.35 | GY/OG | 3027 | XI | — |
| 18 | 0.35 | OG/VT | 3026 | IV | — | Passenger IP Module Stage 2 Low Control | 18 | 0.35 | OG/VT | 3026 | XI | — |
| 19 | 0.35 | GN/BN | 6132 | IX | — | Local Interconnect Network Serial Data Bus 1 | 19 | 0.5 | GN/BN | 6132 | XII | — |
| 20 | 0.35 | GY/GN | 1102 | IX | — | Low Speed GMLAN Serial Data #2 | 20 | 0.75 | GY/GN | 1102 | XIII | — |
| 21 | 0.35 | YE | 6817 | IX | — | LED Backlight Dimming Control | 21 | 0.35 | YE | 6817 | XII | — |
| 22 | 0.5 | GN/GY | 6135 | X | — | Local Interconnect Network Serial Data Bus 4 | 22 | 0.35 | GN/GY | 6135 | XIII | — |
| 23 - 26 | — | — | — | — | — | Not Occupied | 23 - 26 | — | — | — | — | — |
| 27 | 0.35 | YE | 7755 | IX | — | AC Power Outlet Status Indicator Control | 27 | 0.35 | YE | 7755 | XII | — |
| 28 | 0.35 | VT/WH | 239 | IX | — | Run/Crank Ignition 1 Voltage | 28 | 0.35 | VT/WH | 239 | XII | — |
| 29 | 2 | BK | 1250 | VII | — | Ground | 29 | 2 | BK | 1250 | XVII | — |
| 30 | 0.5 | RD/GN | 5140 | V | — | Battery Positive Voltage | 30 | 0.5 | RD/GN | 5140 | XVIII | — |
| 31 | 0.5 | BK/WH | 2751 | I | — | Signal Ground | 31 | 0.5 | BK/WH | 2751 | XIV | — |
| 32 | 0.35 | WH/VT | 6821 | II | — | Surveillance Switch Signal | 32 | 0.35 | WH/VT | 6821 | XIV | — |
| 33 | 0.75 | WH/YE | 1853 | III | — | Right Front Midrange Speaker Control (+) | 33 | 0.75 | WH/YE | 1853 | XVI | — |
| 34 | 0.75 | BN/BK | 1953 | III | — | Right Front Midrange Speaker (-) Low Reference | 34 | 0.75 | BN/BK | 1953 | XVI | — |
| 35 | 0.35 | GY | 1198 | II | — | Endgate Release Switch Analog Signal Interior | 35 | 0.35 | GY | 1198 | XIV | — |
| 36 | 0.5 | WH/BU | 3691 | VIII | — | Trailer Brake Apply Signal | 36 | 0.5 | WH/BU | 3691 | XIV | — |
| 37 | 0.35 | RD/WH | 1340 | II | — | Battery Positive Voltage | 37 | 0.35 | RD/WH | 1340 | XIV | — |
| 38 - 39 | — | — | — | — | — | Not Occupied | 38 - 39 | — | — | — | — | — |

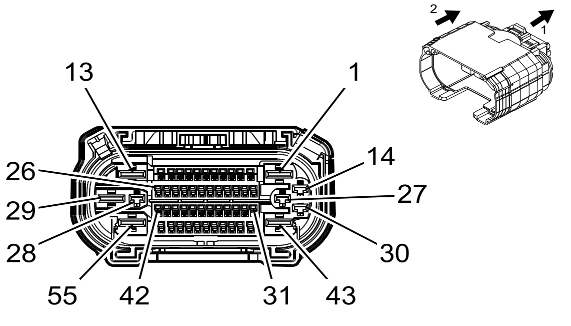
## X275 Instrument Panel Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 40 | 0.35<br>0.35 | GN/WH<br>GN/WH | 24<br>24 | VIII | —<br>DD8/DRZ | Backup Lamp Control<br>Backup Lamp Control | 40 | | | | | |
| 41 | 0.5<br>0.5 | WH/VT<br>WH/VT | 1430<br>1430 | VIII | QT5/QT6<br>QT5/QT6 | Exterior Courtesy Lamp Control<br>Exterior Courtesy Lamp Control | 41 | 0.5<br>0.5 | WH/VT<br>WH/VT | 1430<br>1430 | XIV<br>XIV | QT5/QT6<br>— |
| 42 | 0.35 | VT/BN | 300 | VIII | — | Run Ignition 3 Voltage | 42 | 0.35 | VT/BN | 300 | XIV | — |
| 43 | 2 | BU | 47 | VII | — | Trailer Auxiliary Control | 43 | 2 | BU | 47 | XVII | — |
| 44 | 2 | RD/VT | 1242 | VII | — | Battery Positive Voltage | 44 | 2 | RD/VT | 1242 | XVII | — |
| 45 | 0.75 | BK/WH | 2751 | I | — | Signal Ground | 45 | 0.75 | BK/WH | 2751 | XV | — |
| 46 | 0.35 | VT/BU | 6091 | II | — | Crankshaft Position Sensor Replicated Signal | 46 | 0.35 | VT/BU | 6091 | XIV | — |
| 47 | 0.75 | YE/BK | 117 | VII | — | Right Front Speaker Signal (-) 1 | 47 | 0.75 | YE/BK | 117 | XVI | — |
| 48 | 0.75 | YE | 200 | VII | — | Right Front Speaker Control (+) 1 | 48 | 0.75 | YE | 200 | XVI | — |
| 49 - 50 | — | — | — | — | — | Not Occupied | 49 - 50 | — | — | — | — | — |
| 51 | 0.5 | WH | 46 | VI | UQF | Right Rear Speaker Control (+) | 51 | 0.5 | WH | 46 | XII | UQF |
| 52 | 0.5 | BU/BK | 115 | VI | UQF | Right Rear Speaker Signal (-) | 52 | 0.5 | BU/BK | 115 | XII | UQF |
| 53 | — | — | — | — | — | Not Occupied | 53 | — | — | — | — | — |
| 54 | 0.35 | GY/WH | 3272 | IX | — | Remote Function Actuator Control | 54 | 0.35 | GY/WH | 3272 | XII | — |
| 55 | 0.35 | BU/WH | 3275 | IX | — | Remote Function Actuator Receive Signal | 55 | 0.35 | BU/WH | 3275 | XII | — |
| 56 | 0.35 | YE/GN | 3274 | IX | — | Remote Function Actuator Transmit Signal | 56 | 0.35 | YE/GN | 3274 | XII | — |
| 57 | 0.35 | GY | 3273 | IX | — | Remote Function Actuator Low Reference | 57 | 0.35 | GY | 3273 | XII | — |
| 58 | 0.5 | BN/VT | 193 | X | — | Rear Defog Relay Control | 58 | 0.5 | BN/VT | 193 | XII | — |

## X275 Instrument Panel Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 59 | 0.35 | YE | 6812 | IX | — | Out of Park Signal | 59 | 0.35 | YE | 6812 | XII | — |
| 60 - 62 | — | — | — | — | — | Not Occupied | 60 - 62 | — | — | — | — | — |
| 63 | 0.35 | WH/ GN | 1305 | IX | — | High Speed GMLAN Serial Data (-)9 | 63 | 0.5 | WH/ GN | 1305 | XII | — |
| 64 | 0.35 | BU/ GN | 1304 | IX | — | High Speed GMLAN Serial Data (+)9 | 64 | 0.5 | BU/ GN | 1304 | XII | — |
| 65 | — | — | — | — | — | Not Occupied | 65 | — | — | — | — | — |
| 66 | 0.35 | Bare | 6974 | IX | — | Camera Low Reference | 66 | 0.35 | Bare | 6974 | XII | — |
| 67 | 0.35 | GY/ YE | 6972 | IX | — | Camera Signal 2 + | 67 | 0.35 | GY/ YE | 6972 | XII | — |
| 68 | 0.35 | WH/ BU | 6973 | IX | — | Camera Signal 2 | 68 | 0.35 | WH/ BU | 6973 | XII | — |
| 69 | 0.35 | GN/ BN | 5852 | IX | — | Rear Park Assist LED Disable Signal | 69 | 0.35 | GN/ BN | 5852 | XII | — |
| 70 | 0.35 | VT/ YE | 43 | IX | — | Accessory Ignition Voltage | 70 | 0.35 | VT/ YE | 43 | XII | — |
| 71 - 72 | — | — | — | — | — | Not Occupied | 71 - 72 | — | — | — | — | — |
| 73 | 0.35 | VT/ GY | 1054 | IX | — | Stop Lamp Control | 73 | 0.35<br>0.35 | VT/ WH<br>VT/ GY | 5065<br>1054 | XII<br>XII | EXTENDED/ CREW CAB<br>REGULAR CAB |
| 74 | 0.35 | BN | 7291 | VI | — | Major Endgate Release Switch Signal Interior | 74 | 0.35 | BN | 7291 | XII | — |
| 75 - 76 | — | — | — | — | — | Not Occupied | 75 - 76 | — | — | — | — | — |

# X310 Driver Seat Harness to Body Harness



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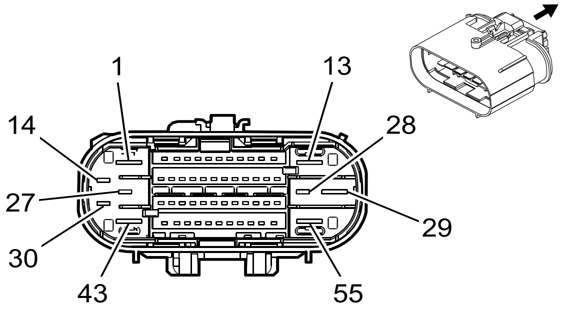


4993301

### Connector Part Information

Harness Type: Driver Seat

OEM Connector: 33357989

Service Connector: Service by Harness - See Part Catalog

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed (BK)

### Connector Part Information

Harness Type: Body

OEM Connector: 33357991

Service Connector: 19371183

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-42 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| IV | 19329756 | J-35616-32 (OR) | J-38125-36 | Not Available | Not Available | Not Available | Not Available |
| V | 19352074 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VI | 19352075 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VII | 19371217 | J-25616-64B (LT BU) | J-38125-12A | Not Available | Not Available | Not Available | Not Available |
| VIII | 84616650 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## X310 Driver Seat Harness to Body Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1150 | II | — | Ground | 1 | 2.5 | BK | 1150 | IV | — |
| 2 | — | — | — | — | — | Not Occupied | 2 | — | — | — | — | — |
| 3 | 0.5 | GN/WH | 7530 | I | — | Local Interconnect Network Serial Data Bus 8 | 3 | 0.35 | GN/WH | 7530 | V | — |
| 4 | 0.5 | RD/BN | 1140 | I | — | Battery Positive Voltage | 4 | 0.35 | RD/BN | 1140 | V | — |

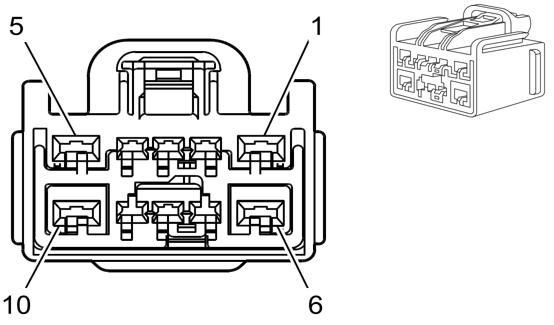
## X310 Driver Seat Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 0.5 | GN | 5060 | I | — | Low Speed GMLAN Serial Data | 5 | 0.35 | GN | 5060 | V | — |
| 6 | 0.5 | BU/GN | 614 | I | — | Memory Seat Switch Set Signal | 6 | 0.35 | BU/GN | 614 | V | — |
| 7 | 0.5 | BK/BU | 5978 | I | — | Memory Switch Low Reference | 7 | 0.35 | BK/BU | 5978 | V | — |
| 8 | 0.5 | WH | 615 | I | — | Memory Seat Switch Signal 1 | 8 | 0.35 | WH | 615 | V | — |
| 9 | — | — | — | — | — | Not Occupied | 9 | — | — | — | — | — |
| 10 | 0.5 | BK/YE | 2080 | I | — | Driver Heated Seat NTC Low Reference | 10 | 0.35 | BK/YE | 2080 | V | — |
| 11 | 0.5 | YE/GY | 2079 | I | — | Driver Heated Seat NTC Signal | 11 | 0.35 | YE/GY | 2079 | V | — |
| 12 | — | — | — | — | — | Not Occupied | 12 | — | — | — | — | — |
| 13 | 2.5 | RD/YE | 5040 | II | — | Battery Positive Voltage | 13 | 2.5 | RD/YE | 5040 | IV | — |
| 14 | — | — | — | — | — | Not Occupied | 14 | — | — | — | — | — |
| 15 | 0.75 | BN/VT | 2077 | I | — | Driver Heated Seat Element Control | 15 | 0.75 | BN/VT | 2077 | VI | — |
| 16 | 0.75 | BN/BK | 2078 | I | — | Driver Heated Seat Element Low Reference | 16 | 0.75 | BN/BK | 2078 | VI | — |
| 17 | 0.5 | BK/VT | 2426 | I | — | Driver Heated Back NTC Low Reference | 17 | 0.35 | BK/VT | 2426 | V | — |
| 18 | 0.5 | BU | 2425 | I | — | Driver Heated Back NTC Signal | 18 | 0.35 | BU | 2425 | V | — |
| 19 | 0.75 | BN | 2432 | I | — | Driver Heated Back Element Control | 19 | 0.75 | BN | 2432 | VI | — |
| 20 | 0.5 | GN/VT | 5906 | I | — | Driver Seat Vent Motor Control 1 | 20 | 0.35 | GN/VT | 5906 | V | — |
| 21 | 0.75 | VT/WH | 4939 | I | — | Run/Crank Ignition 1 Voltage | 21 | 0.5 | VT/WH | 4939 | V | — |
| 22 - 28 | — | — | — | — | — | Not Occupied | 22 - 28 | — | — | — | — | — |
| 29 | 0.75 | RD/YE | 8840 | II | — | Battery Positive Voltage | 29 | 0.75 | RD/YE | 8840 | IV | — |

## X310 Driver Seat Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 - 31 | — | — | — | — | — | Not Occupied | 30 - 31 | — | — | — | — | — |
| 32 | 0.35 | OG/ BN | 238 | I | — | Driver Seat Belt Switch Signal | 32 | 0.35 | OG/ BN | 238 | V | — |
| 33 | 0.5 | BK/ OG | 1363 | I | — | Driver Seat Belt Switch Low Reference | 33 | 0.35 | BK/ OG | 1363 | V | — |
| 34 | — | — | — | — | — | Not Occupied | 34 | — | — | — | — | — |
| 35 | 0.5 | OG/ BU | 3068 | III | — | Driver Side Impact Module High Control | 35 | 0.5<br>0.5 | OG/ BU<br>OG/ BU | 3068<br>3068 | VIII<br>VII | EXTENDED CAB/ CREW CAB<br>REGULAR CAB |
| 36 | 0.5 | BK/ OG | 3069 | III | — | Driver Side Impact Module Low Control | 36 | 0.5<br>0.5 | GN/ OG<br>GN/ OG | 3069<br>3069 | VII<br>VIII | REGULAR CAB<br>EXTENDED CAB/ CREW CAB |
| 37 - 43 | — | — | — | — | — | Not Occupied | 37 - 43 | — | — | — | — | — |
| 44 | — | — | — | — | — | Not Used | 44 | 1 | BK | 9003 | VI | — |
| 45 - 55 | — | — | — | — | — | Not Occupied | 45 - 55 | — | — | — | — | — |

# X318 Sunroof Jumper Harness to Headliner Harness



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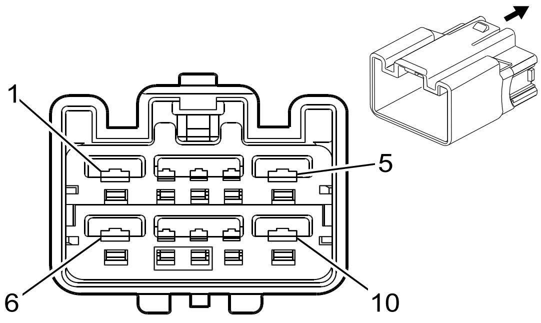


1851890

## Connector Part Information

Harness Type: Sunroof Jumper
OEM Connector: 19167677
Service Connector: Service by Harness - See Part Catalog
Description: 10-Way F 1.5, 2.8 Kaizen Series (L-GY)

## Connector Part Information

Harness Type: Headliner
OEM Connector: 13506926
Service Connector: 89047070
Description: 10-Way M YESC Kaizen Series (L-GY)

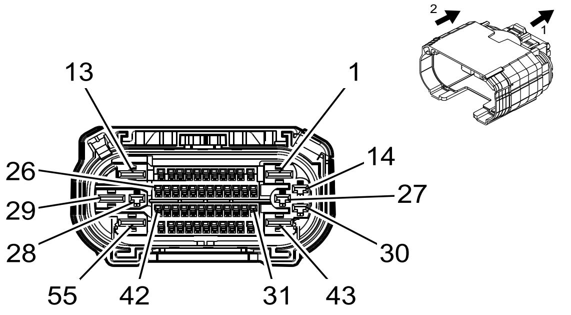
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | 13575818 | J-35616-3 (GY) | J-38125-553 | Not Available | Not Available | Not Available | Not Available |
| III | 13575824 | J-35616-5 (PU) | J-38125-11A | 7114-4112-02 | Yazaki 9 | C | D |

## X318 Sunroof Jumper Harness to Headliner Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | — | — | Not Occupied | 1 - 2 | — | — | — | — | — |
| 3 | 0.35 | BK/ GY | 128 | I | — | Sunroof Switch Low Reference | 3 | 0.35 | BK/ GY | 128 | II | — |
| 4 | 0.35 | GN/ BN | 6132 | I | — | Local Interconnect Network Serial Data Bus 1 | 4 | 0.35 | GN/ BN | 6132 | II | — |
| 5 | 2.5 | BK | 1050 | I | — | Ground | 5 | 2.5 | BK | 1050 | III | — |
| 6 | 2.5 | RD/ GY | 3140 | I | — | Battery Positive Voltage | 6 | 2.5 | RD/ GN | 3140 | III | — |
| 7 | 0.35 | BU/ VT | 5027 | I | — | Sunroof Switch Data 1 Signal | 7 | 0.35 | BU/ VT | 5027 | II | — |
| 8 | — | — | — | — | — | Not Occupied | 8 | — | — | — | — | — |
| 9 | 0.35 | WH/ YE | 3031 | I | — | Sunroof Vent Switch Signal | 9 | 0.35 | WH/ GN | 3031 | II | — |
| 10 | — | — | — | — | — | Not Occupied | 10 | — | — | — | — | — |

# X320 Passenger Seat Harness to Body Harness



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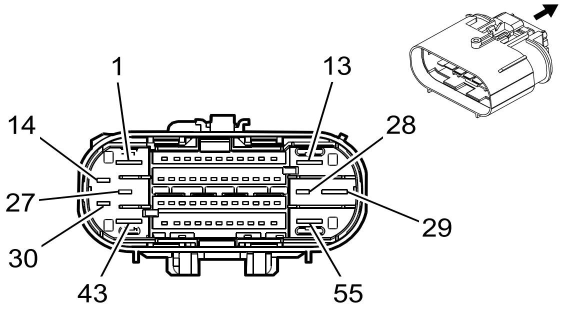


4993301

## Connector Part Information

Harness Type: Passenger Seat

OEM Connector: 13512646

Service Connector: Service by Harness - See Part Catalog

Description: 55-Way F 1.2 OCS, 2.8, 6.3 CTS Series, Sealed (BK)

## Connector Part Information

Harness Type: Body

OEM Connector: 33357991

Service Connector: 19371183

Description: 55-Way M 1.2 OCS, 2.8, 6.3 CTS Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | Not Required | J-35616-42 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| IV | 13580827 | J-35616-5 (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| V | 19329756 | J-35616-32 (OR) | J-38125-36 | Not Available | Not Available | Not Available | Not Available |
| VI | 19352074 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VII | 19352075 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VIII | 19371217 | J-25616-64B (LT BU) | J-38125-12A | Not Available | Not Available | Not Available | Not Available |
| IX | 84616650 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## X320 Passenger Seat Harness to Body Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | BK | 1250 | III | — | Ground | 1 | 2.5 | BK | 1250 | V | — |
| 2 - 8 | — | — | — | — | — | Not Occupied | 2 - 8 | — | — | — | — | — |
| 9 | 0.5 | GN/BU | 6133 | I | — | Local Interconnect Network Serial Data Bus 2 | 9 | 0.35 | GN/BU | 6133 | VI | — |

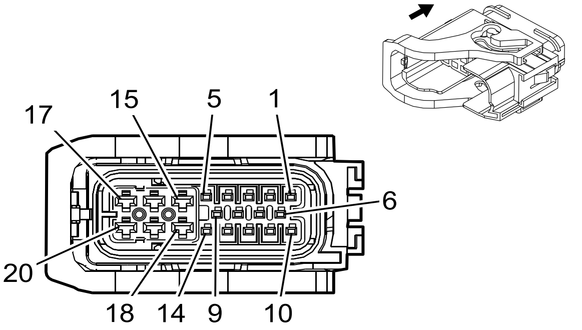
## X320 Passenger Seat Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.5 | BK/YE | 2080 | I | — | Driver Heated Seat NTC Low Reference | 10 | 0.35 | BK/YE | 2080 | VI | — |
| 11 | 0.5 | YE/GY | 2079 | I | — | Driver Heated Seat NTC Signal | 11 | 0.35 | YE/GY | 2079 | VI | — |
| 12 | — | — | — | — | — | Not Occupied | 12 | — | — | — | — | — |
| 13 | 2.5 | RD/BN | 1440 | III | — | Battery Positive Voltage | 13 | 2.5 | RD/BN | 1440 | V | — |
| 14 | 0.75 | RD | 6140 | II | — | Battery Positive Voltage | 14 | 0.5 | RD | 6140 | IV | — |
| 15 | 0.75 | BN/VT | 2077 | I | — | Driver Heated Seat Element Control | 15 | 0.75 | BN/VT | 2077 | VII | — |
| 16 | 0.75 | BN/BK | 2078 | I | — | Driver Heated Seat Element Low Reference | 16 | 0.75 | BN/BK | 2078 | VII | — |
| 17 | 0.5 | BK/VT | 2426 | I | — | Driver Heated Back NTC Low Reference | 17 | 0.35 | BK/VT | 2426 | VI | — |
| 18 | 0.5 | BU | 2425 | I | — | Driver Heated Back NTC Signal | 18 | 0.35 | BU | 2425 | VI | — |
| 19 | 0.75 | BN | 2432 | I | — | Driver Heated Back Element Control | 19 | 0.75 | BN | 2432 | VII | — |
| 20 | 0.35 | GN/VT | 5906 | I | — | Driver Seat Vent Motor Control 1 | 20 | 0.35 | GN/VT | 5906 | VI | — |
| 21 | 0.75 | VT/WH | 4939 | I | — | Run/Crank Ignition 1 Voltage | 21 | 0.5 | VT/WH | 4939 | VI | — |
| 22 | 0.5 | RD/GN | 4440 | I | — | Battery Positive Voltage | 22 | 0.5 | RD/GN | 4440 | VI | — |
| 23 | 0.5 | GN | 5060 | I | — | Low Speed GMLAN Serial Data | 23 | 0.35 | GN | 5060 | VI | — |
| 24 | 0.5 | GY/OG | 3946 | I | — | Automatic Locking Retractor Switch Low Reference | 24 | 0.5 | GY/OG | 3946 | VI | — |
| 25 | 0.5 | OG/BN | 3947 | I | — | Automatic Locking Retractor Switch Signal | 25 | 0.5 | OG/BN | 3947 | VI | — |
| 26 | 0.5 | BK/WH | 2551 | I | — | Signal Ground | 26 | 0.5 | BK/WH | 2551 | VI | — |
| 27 | 0.75 | RD/GN | 5140 | II | — | Battery Positive Voltage | 27 | 0.5 | RD/GN | 5140 | IV | — |
| 28 | — | — | — | — | — | Not Occupied | 28 | — | — | — | — | — |

## X320 Passenger Seat Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 | 0.75 | RD/ YE | 8840 | III | — | Battery Positive Voltage | 29 | 0.75 | RD/ YE | 8840 | V | — |
| 30 - 31 | — | — | — | — | — | Not Occupied | 30 - 31 | — | — | — | — | — |
| 32 | 0.35 | OG/ VT | 1362 | I | — | Passenger Seat Belt Switch Signal | 32 | 0.35 | OG/ VT | 1362 | VI | — |
| 33 | 0.5 | BK/ OG | 1361 | I | — | Passenger Seat Belt Switch Low Reference | 33 | 0.35 | BK/ OG | 1361 | VI | — |
| 34 | — | — | — | — | — | Not Occupied | 34 | — | — | — | — | — |
| 35 | 0.5 | OG/ GY | 3066 | I | — | Passenger Side Impact Module High Control | 35 | 0.35 | OG/ GY | 3066 | IX | — |
| 36 | 0.5 | BU/ OG | 3067 | I | — | Passenger Side Impact Module Low Control | 36 | 0.35 | BN/ OG | 3067 | VIII | — |
| 37 - 55 | — | — | — | — | — | Not Occupied | 37 - 55 | — | — | — | — | — |

# X348 Body Harness to Front Center Seat Harness (AZ3)



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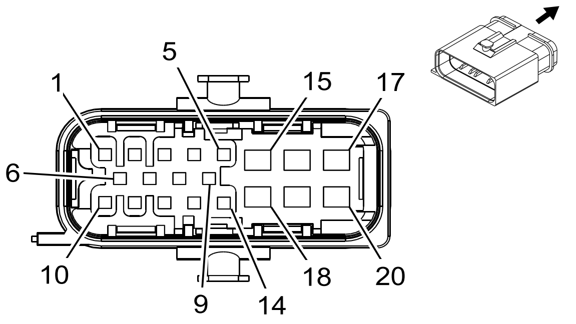


3825586

## Connector Part Information

Harness Type: Body
OEM Connector: 13974124
Service Connector: 19371189
Description: 20-Way F

## Connector Part Information

Harness Type: Front Middle Seat
OEM Connector: 13942796
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way M 1.2, 2.8 Multiple Contact Point Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576374 | J-35616-35 (VT) | J-38125-557 | 1-968857-3 | Lear 7 | C | 1 |
| II | 19119772 | J-35616-35 (VT) | J-38125-215A | 1241388-1 | Lear 17 | 2 | 4 |
| III | 19119772 | J-35616-35 (VT) | J-38125-215A | 1241388-1 | Lear 17 | E | C |
| IV | 19119772 | J-35616-4A (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| V | 19301535 | J-35616-16 (LT GN) | J-38125-12A | Not Available | Not Available | Not Available | Not Available |
| VI | Not Required | J-35616-5 (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

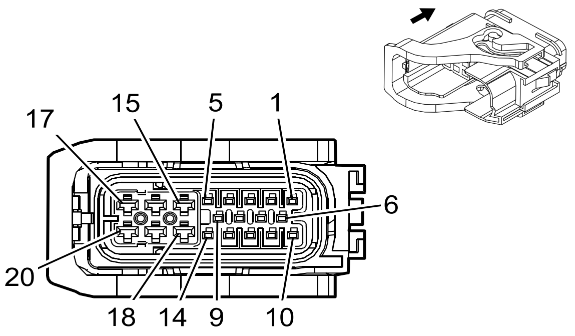
## X348 Body Harness to Front Center Seat Harness (AZ3)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | 0.35 | YE | 6817 | V | — | LED Backlight Dimming Control | 2 | — | — | — | — | — |
| 3 | 0.35 | GN/VT | 7533 | V | — | Local Interconnect Network Serial Data Bus 11 | 3 | 0.35 | GN/VT | 7533 | VI | — |
| 4 | 0.35 | GN/GY | 3277 | V | — | Vehicle Anti-Theft System Immobilizer Low Reference | 4 | 0.35 | GN/GY | 3277 | VI | — |

## X348 Body Harness to Front Center Seat Harness (AZ3) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 0.35 | GY/ BK | 3276 | V | — | Vehicle Anti-Theft System Immobilizer Control | 5 | 0.35 | GY/ BK | 3276 | VI | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |
| 7 | 0.35 | RD/ WH | 1340 | V | — | Battery Positive Voltage | 7 | — | — | — | — | — |
| 8 | 0.35 | GN/ WH | 4115 | V | — | Local Interconnect Network Serial Data Bus 15 | 8 | — | — | — | — | — |
| 9 | 0.35 | VT/ YE | 143 | V | — | Accessory Ignition Voltage | 9 | 0.5 | VT/ YE | 143 | VI | — |
| 10 | — | — | — | — | — | Not Occupied | 10 | — | — | — | — | — |
| 11 | 0.35 | VT | 4601 | V | — | Retained Accessory Power Fused Control | 11 | — | — | — | — | — |
| 12 | 0.35 | GN | 4512 | V | — | Wireless Charging System Charge Indicator Control | 12 | — | — | — | — | — |
| 13 | 0.35 | GY/ BK | 3555 | V | — | Passive Start Interior Antenna 2 Signal Lo | 13 | 0.5 | GY/ BK | 3555 | VI | — |
| 14 | 0.35 | BU | 3554 | V | — | Passive Start Interior Antenna 2 Signal Hi | 14 | 0.5 | BU | 3554 | VI | — |
| 15 | 1.5 | RD/ WH | 1040 | I | — | Battery Positive Voltage | 15 | 1.5 | RD/ WH | 1040 | VI | — |
| 16 | 0.5 | WH/ BN | 6815 | III | — | Inadvertent Power Control | 16 | — | — | — | — | — |
| 17 | 1 | BK | 1250 | II | — | Ground | 17 | — | — | — | — | — |
| 18 | — | — | — | — | — | Not Occupied | 18 | — | — | — | — | — |
| 19 | 0.35 | BN | 4511 | IV | — | Wireless Charging System Fault Indicator Control | 19 | — | — | — | — | — |
| 20 | 2 | BK | 1250 | I | — | Ground | 20 | 2 | BK | 1150 | VI | — |

# X348 Body Harness to Floor Console Harness (D07)



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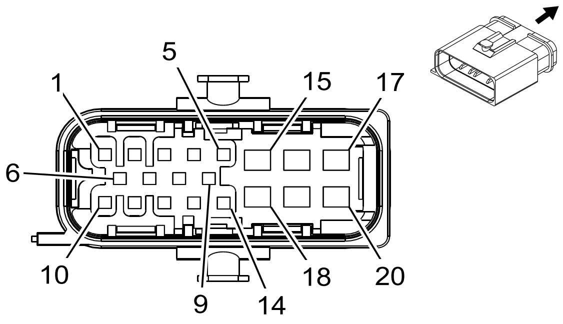


3825586

## Connector Part Information

Harness Type: Body
OEM Connector: 13974124
Service Connector: 19371189
Description: 20-Way F

## Connector Part Information

Harness Type: Floor Console
OEM Connector: 35137619
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way M

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | 13576374 | J-35616-35 (VT) | J-38125-557 | 1-968857-3 | Lear 7 | C | 1 |
| II | 19119772 | J-35616-35 (VT) | J-38125-215A | 1241388-1 | Lear 17 | E | C |
| III | 19119772 | J-35616-4A (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | 19301535 | J-35616-16 (LT GN) | J-38125-12A | Not Available | Not Available | Not Available | Not Available |
| V | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| VI | Not Required | J-35616-5 (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

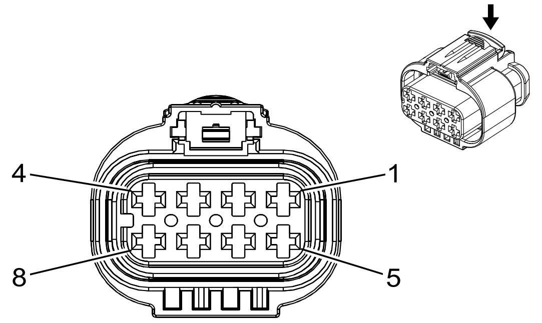
## X348 Body Harness to Floor Console Harness (D07)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | 0.35 | YE | 6817 | IV | — | LED Backlight Dimming Control | 2 | 0.35 | YE | 6817 | V | — |
| 3 | 0.35 | GN/VT | 7533 | IV | — | Local Interconnect Network Serial Data Bus 11 | 3 | 0.35 | GN/VT | 7533 | V | — |
| 4 | 0.35 | GN/GY | 3277 | IV | — | Vehicle Anti-Theft System Immobilizer Low Reference | 4 | 0.35 | GN/GY | 3277 | V | — |

## X348 Body Harness to Floor Console Harness (D07) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 | 0.35 | GY/BK | 3276 | IV | — | Vehicle Anti-Theft System Immobilizer Control | 5 | 0.35 | GY/BK | 3276 | V | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |
| 7 | 0.35 | RD/WH | 1340 | IV | — | Battery Positive Voltage | 7 | 0.35 | RD/WH | 1340 | V | — |
| 8 | 0.35 | GN/WH | 4115 | IV | — | Local Interconnect Network Serial Data Bus 15 | 8 | 0.35 | GN/WH | 4115 | V | — |
| 9 | 0.35 | VT/YE | 143 | IV | — | Accessory Ignition Voltage | 9 | 0.35 | VT/YE | 143 | V | — |
| 10 | — | — | — | — | — | Not Occupied | 10 | — | — | — | — | — |
| 11 | 0.35 | VT | 4601 | IV | — | Retained Accessory Power Fused Control | 11 | 0.35 | VT | 4601 | V | — |
| 12 | 0.35 | GN | 4512 | IV | — | Wireless Charging System Charge Indicator Control | 12 | 0.35 | GN | 4512 | V | — |
| 13 | 0.35 | GY/BK | 3555 | IV | — | Passive Start Interior Antenna 2 Signal Lo | 13 | 0.5 | GY/BK | 3555 | V | — |
| 14 | 0.35 | BU | 3554 | IV | — | Passive Start Interior Antenna 2 Signal Hi | 14 | 0.5 | BU | 3554 | V | — |
| 15 | 1.5 | RD/WH | 1040 | I | — | Battery Positive Voltage | 15 | 1.5 | RD/WH | 1040 | VI | — |
| 16 | 0.5 | WH/BN | 6815 | II | — | Inadvertent Power Control | 16 | 0.5 | WH/BN | 6815 | VI | — |
| 17 | 1.5 | BK | 1250 | I | — | Ground | 17 | 1 | BK | 1150 | VI | — |
| 18 | — | — | — | — | — | Not Occupied | 18 | — | — | — | — | — |
| 19 | 0.35 | BN | 4511 | III | — | Wireless Charging System Fault Indicator Control | 19 | 0.35 | BN | 4511 | VI | — |
| 20 | 2 | BK | 1250 | I | — | Ground | 20 | 2 | BK | 1150 | VI | — |

# X350 Chassis Harness to Fuel Tank Harness



—

3749582

### Connector Part Information

Harness Type: Chassis
OEM Connector: 33180742
Service Connector: 19354078
Description: 8-Way F 2.8 Series, Sealed (L-GY)

### Connector Part Information

Harness Type: Fuel Tank
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way M

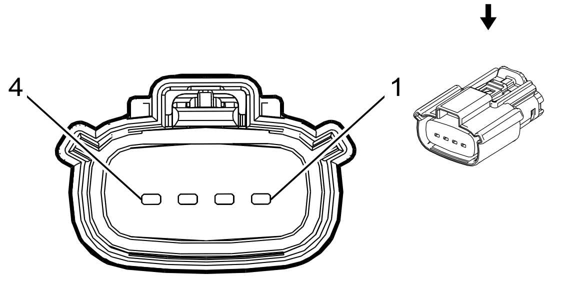
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-5 (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

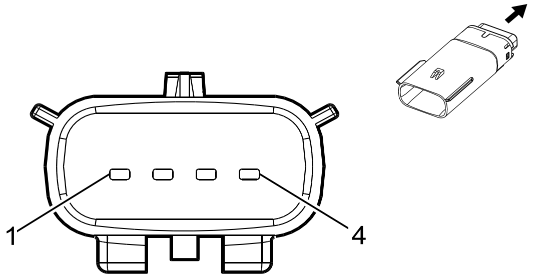
## X350 Chassis Harness to Fuel Tank Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | GY | 120 | I | — | Fuel Pump Control | 1 | 2.5 | GY | 120 | II | — |
| 2 | 2.5 | YE/GY | 4137 | I | — | Fuel Pump Supply Voltage Phase 2 | 2 | 2.5 | YE/GY | 4137 | II | — |
| 3 | 2.5 | WH/BN | 4138 | I | — | Fuel Pump Supply Voltage Phase 3 | 3 | 2.5 | WH/BN | 4138 | II | — |
| 4 | 0.35 | BN | 7444 | I | — | Fuel System Control Module Shield Ground | 4 | 0.35 | BN | 7444 | II | — |
| 5 | 0.5 | BU/VT | 1589 | I | — | Primary Fuel Level Sensor Signal | 5 | 0.5 | BU/VT | 1589 | II | — |
| 6 | 0.5 | BK/GN | 6281 | I | — | Fuel Level Sensor Low Reference | 6 | 0.5 | BK/GN | 6281 | II | — |
| 7 - 8 | — | — | — | — | — | Not Occupied | 7 - 8 | — | — | — | — | — |

# X370 Body Harness to Rear Seat Harness (KA6)



2474747



2917338

## Connector Part Information

Harness Type: Body
OEM Connector: 15456952
Service Connector: 19371211
Description: 4-Way F 1.5 Series, Sealed (BK)

## Connector Part Information

Harness Type: Rear Seat
OEM Connector: 33481-0401
Service Connector: Service by Harness - See Part Catalog
Description: 4-Way M 1.5 Series, Sealed (BK)

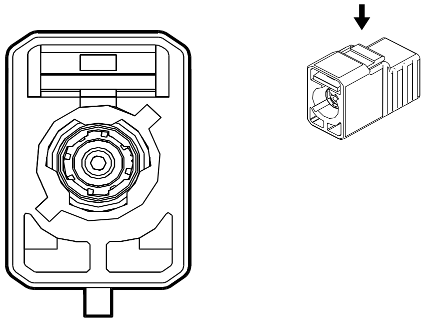
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

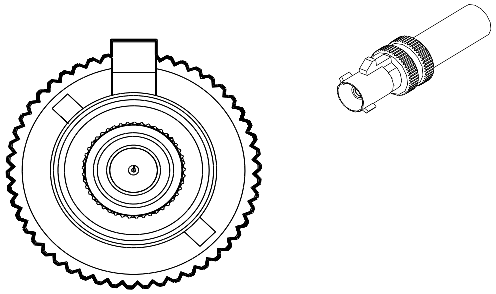
## X370 Body Harness to Rear Seat Harness (KA6)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | RD/YE | 240 | I | — | Battery Positive Voltage | 1 | 0.75 | RD/YE | 240 | II | — |
| 2 | 0.5 | RD/VT | 340 | I | — | Battery Positive Voltage | 2 | 0.75 | RD/VT | 340 | II | — |
| 3 | 0.35 | GN/BU | 6133 | I | — | Local Interconnect Network Serial Data Bus 2 | 3 | 0.5 | GN/BU | 6133 | II | — |
| 4 | 1 | BK | 1150 | I | — | Ground | 4 | 1 | BK | 1150 | II | — |

# X379 Headliner Harness to Inside Rearview Mirror Jumper Harness (DRZ)



3293625



4249257

## Connector Part Information

Harness Type: Inside Rearview Mirror Jumper COAX
OEM Connector: 13583914
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way F Coax Type (BU)

## Connector Part Information

Harness Type: Inside Rearview Mirror Jumper COAX
OEM Connector: 13583912
Service Connector: Service by Cable Assembly — See Part Catalog
Description: 1-Way M Coax Type (BU)

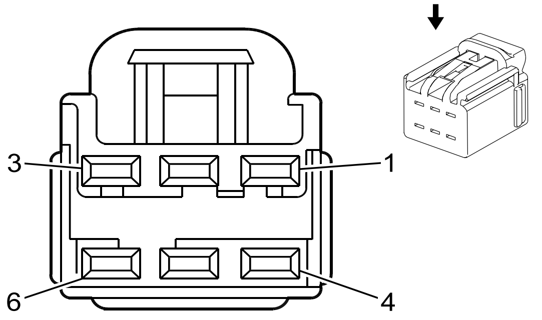
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

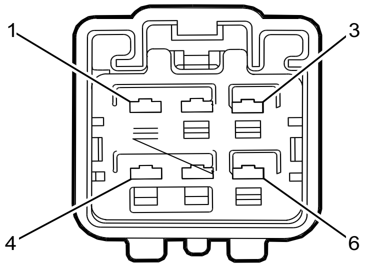
## X379 Headliner Harness to Inside Rearview Mirror Jumper Harness (DRZ)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax | — | I | — | Coaxial Camera Signal | — | — | Coax | — | I | — |

# X380 Center High Mounted Stop Lamp Jumper Harness to Headliner Harness (Extended Cab/Crew Cab)



1519696



1849802

## Connector Part Information

Harness Type: Center High Mounted Stop Lamp Jumper
OEM Connector: 10847014
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F YESC Kaizen Series (L-GY)

## Connector Part Information

Harness Type: Headliner
OEM Connector: 10847012
Service Connector: 19153164
Description: 6-Way M YESC Kaizen Series (L-GY)

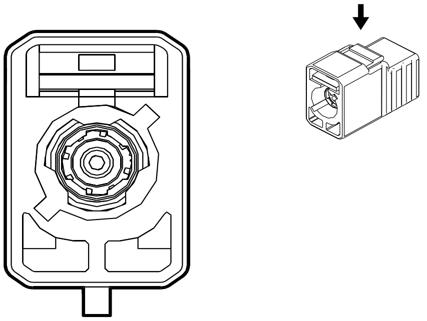
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-5 (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

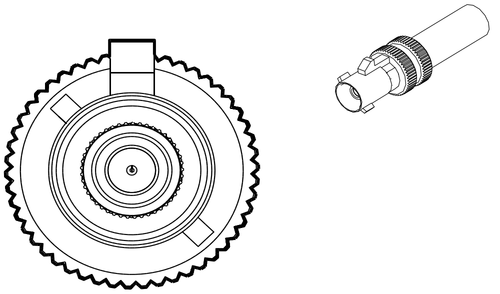
## X380 Center High Mounted Stop Lamp Jumper Harness to Headliner Harness (Extended Cab/Crew Cab)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.35 | WH/VT | 1430 | I | — | Exterior Courtesy Lamp Control | 1 | 0.35 | WH/VT | 1430 | II | — |
| 2 | 0.35 | VT/WH | 5065 | I | — | Stop Lamp Relay Coil Control | 2 | 0.5 | VT/WH | 5065 | II | — |
| 3 | 0.35 | BK | 1050 | I | — | Ground | 3 | 0.35 | BK | 1050 | II | — |
| 4 | 2.5 | GN/BU | 5989 | I | — | Emergency Lamp Relay Contact Control | 4 | 2.5 | GN/BU | 5989 | II | — |
| 5 | 2.5 | BK | 1050 | I | — | Ground | 5 | 2.5 | BK | 1050 | II | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |

# X381 Center High Mounted Stop Lamp Jumper Harness to Inside Rearview Mirror Jumper Harness (DRZ)



3293625



4249257

## Connector Part Information

Harness Type: Inside Rearview Mirror Jumper COAX

OEM Connector: 13583914

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type (BU)

## Connector Part Information

Harness Type: Center High Mounted Stop Lamp Jumper COAX

OEM Connector: 13583912

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type (BU)

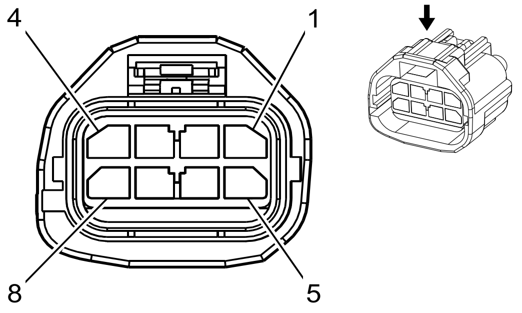
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

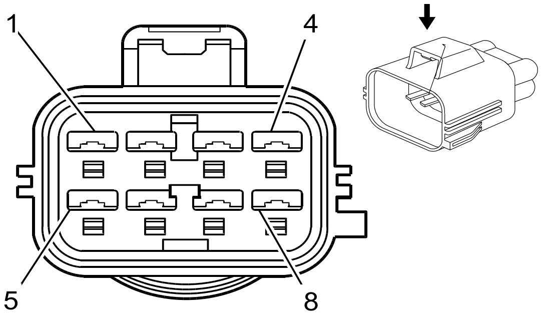
## X381 Center High Mounted Stop Lamp Jumper Harness to Inside Rearview Mirror Jumper Harness (DRZ)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax | — | I | — | Coaxial Camera Signal | — | — | Coax | — | I | — |

## X408 Left Assist Step Jumper Harness to Chassis Harness (BRS)



1401778



1856785

### Connector Part Information

Harness Type: Left Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F

### Connector Part Information

Harness Type: Chassis
OEM Connector: 15419459
Service Connector: 19367561
Description: 8-Way M 2.8 Series, Sealed (D-GY)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-5 (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

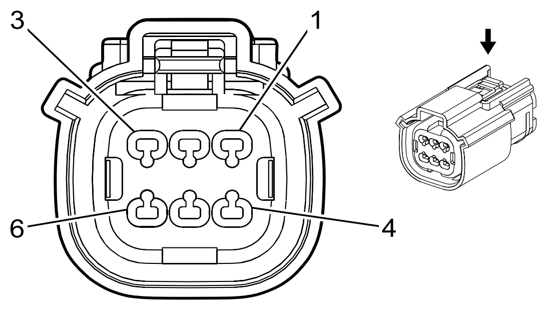
### X408 Left Assist Step Jumper Harness to Chassis Harness (BRS)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | YE | 7472 | I | — | Articulating Running Boards Motor Left Control Retract | 1 | 2 | GY | 7472 | II | — |
| 2 | 0.5 | OG/WH | 7468 | I | — | Running Boards Motor Hall Sensor Left 5V Reference | 2 | 0.5 | VT/RD | 7468 | II | — |
| 3 | 0.5 | YE/WH | 7467 | I | — | Running Boards Motor Hall Sensor Left Signal | 3 | 0.5 | YE | 7467 | II | — |
| 4 | 0.5 | BN/WH | 7466 | I | — | Running Boards Motor Hall Sensor Left Low Reference | 4 | 0.5 | YE/BN | 7466 | II | — |
| 5 | 2 | OG | 7471 | I | — | Articulating Running Boards Motor Left Control Extend | 5 | 2 | WH/BN | 7471 | II | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |

## X408 Left Assist Step Jumper Harness to Chassis Harness (BRS) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | RD | 4746 | I | — | Articulating Running Board Left Kick Switch Signal | 7 | 0.5 | BU/GN | 4746 | II | — |
| 8 | 0.5 | BK | 685 | I | — | Articulating Running Board Kick Switch Return | 8 | 0.5 | BK/BU | 685 | II | — |

# X410 Tail Lamp - Left Harness to Chassis Harness



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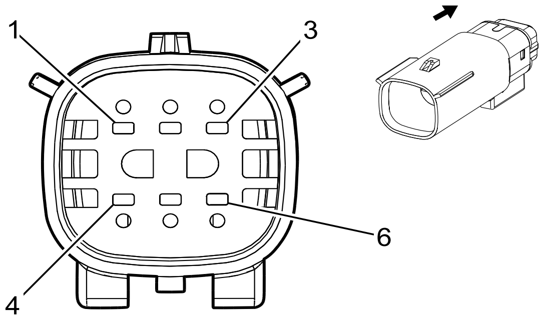


1986159

## Connector Part Information

Harness Type: Tail Lamp - Left
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F

## Connector Part Information

Harness Type: Chassis
OEM Connector: 35014074
Service Connector: 13585853
Description: 6-Way M 150 MX Series, Sealed (BK)

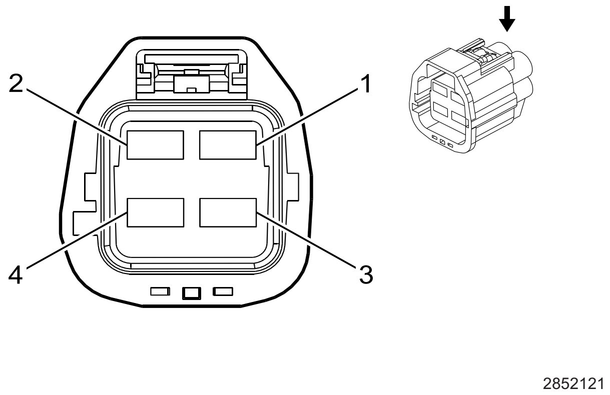
## Terminal Part Information

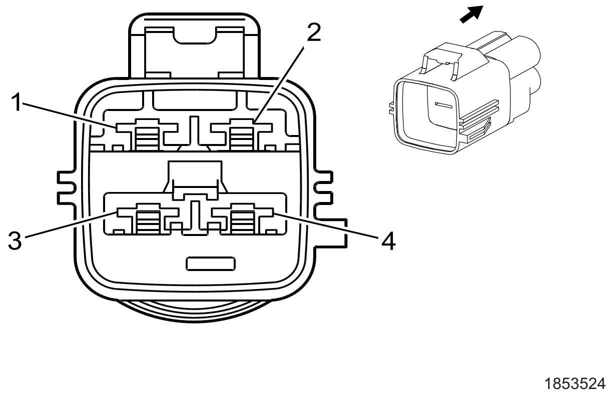
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X410 Tail Lamp - Left Harness to Chassis Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BN | 709 | I | — | Left Park Lamp Control | 1 | 0.75 | VT/GY | 709 | II | — |
| 2 | 0.5 | RD | 5356 | I | GF2/GF4/GF9/GFC/GFD/GFF/GFI/GFJ/GPZ | Left Tail Lamp Outage Detection Signal | 2 | 0.5 | YE/BK | 5356 | II | GF2/GF4/GF9/GFC/GFD/GFF/GFI/GFJ/GPZ |
| 3 | 0.5 | BU | 7762 | I | — | Cargo Bed Lamp Control | 3 | 0.5 | GY/BU | 7762 | II | — |
| 4 | 0.5 | GN | 24 | I | — | Backup Lamp Control | 4 | 0.5 | GN/WH | 24 | II | — |
| 5 | 1 | GN | 18 | I | — | Left Rear Stop/Turn Lamp Control | 5 | 1 | YE/BU | 18 | II | — |
| 6 | 0.75 | BK | 1450 | I | — | Ground | 6 | 0.75 | BK | 1450 | II | — |

# X415 Chassis Rear Extension Harness to Chassis Harness





## Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 7283-3601-10
Service Connector: 19371198
Description: 4-Way F 6.3 Series, Sealed (GY)

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33360098
Service Connector: 19371198
Description: 4-Way M 6.3 Series, Sealed (GY)

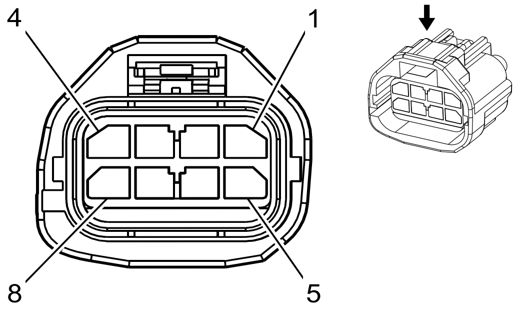
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-42 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-43 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

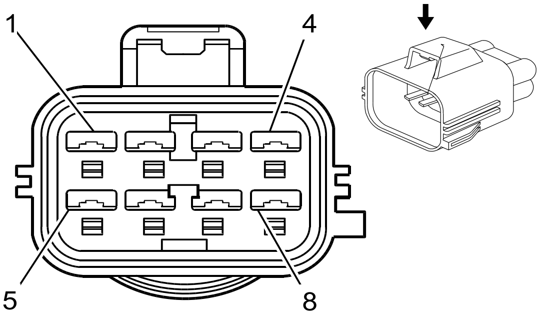
## X415 Chassis Rear Extension Harness to Chassis Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | WH | 2001 | I | — | Park Brake Motor Apply Left Rear Control | 1 | 5 | WH | 2001 | II | — |
| 2 | 2.5 | OG | 4369 | I | — | Park Brake Motor Low Reference Left Rear | 2 | 5 | GY/ BK | 4369 | II | — |
| 3 | 2.5 | OG | 1988 | I | — | Park Brake Motor Apply Right Rear Control | 3 | 5 | GN/ VT | 1988 | II | — |
| 4 | 2.5 | WH | 4368 | I | — | Park Brake Motor Low Reference Right Rear | 4 | 5 | GY | 4368 | II | — |

## X418 Right Assist Step Jumper Harness to Chassis Harness (BRS)



1401778



1856785

### Connector Part Information

Harness Type: Right Assist Step Jumper
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 8-Way F

### Connector Part Information

Harness Type: Chassis
OEM Connector: 15419459
Service Connector: 19367561
Description: 8-Way M 2.8 Series, Sealed (D-GY)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-5 (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

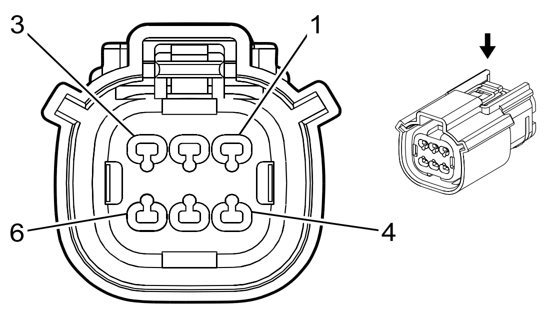
### X418 Right Assist Step Jumper Harness to Chassis Harness (BRS)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | YE | 7469 | I | — | Articulating Running Boards Motor Right Control Retract | 1 | 2 | GN | 7469 | II | — |
| 2 | 0.5 | OG/ WH | 7464 | I | — | Running Boards Motor Hall Sensor Right 5V Reference | 2 | 0.5 | GN/ RD | 7464 | II | — |
| 3 | 0.5 | YE/ WH | 7465 | I | — | Running Boards Motor Hall Sensor Right Signal | 3 | 0.5 | VT | 7465 | II | — |
| 4 | 0.5 | BN/ WH | 7463 | I | — | Running Boards Motor Hall Sensor Right Low Reference | 4 | 0.5 | YE/ BK | 7463 | II | — |
| 5 | 2 | OG | 7470 | I | — | Articulating Running Boards Motor Right Control Extend | 5 | 2 | BU | 7470 | II | — |
| 6 | — | — | — | — | — | Not Occupied | 6 | — | — | — | — | — |

## X418 Right Assist Step Jumper Harness to Chassis Harness (BRS) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | 0.5 | RD | 4747 | I | — | Articulating Running Board Right Kick Switch Signal | 7 | 0.5 | WH | 4747 | II | — |
| 8 | 0.5 | BK | 685 | I | — | Articulating Running Board Kick Switch Return | 8 | 0.5 | BK/ BU | 685 | II | — |

# X420 Tail Lamp - Right Harness to Chassis Harness



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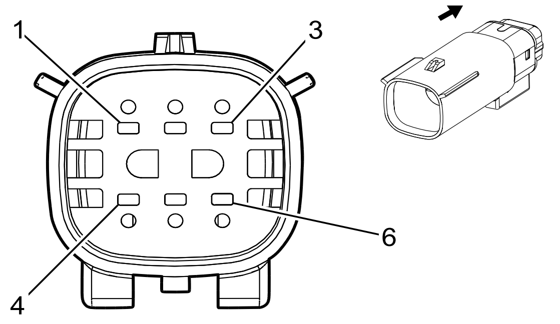


1986159

## Connector Part Information

Harness Type: Tail Lamp - Right
OEM Connector: Not Available
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F

## Connector Part Information

Harness Type: Chassis
OEM Connector: 35014074
Service Connector: 13585853
Description: 6-Way M 150 MX Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X420 Tail Lamp - Right Harness to Chassis Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BN | 309 | I | — | Right Park Lamp Control | 1 | 0.75 | GY/BN | 309 | II | — |
| 2 | 0.5 | RD | 5357 | I | GF2/GF4/GF9/GFC/GFD/GFF/GFI/GFJ/GPZ | Right Tail Lamp Outage Detection Signal | 2 | 0.5 | VT/YE | 5357 | II | GF2/GF4/GF9/GFC/GFD/GFF/GFI/GFJ/GPZ |
| 3 | 0.5 | BU | 7762 | I | — | Cargo Bed Lamp Control | 3 | 0.5 | GY/BU | 7762 | II | — |
| 4 | 0.5 | GN | 24 | I | — | Backup Lamp Control | 4 | 0.5 | GN/WH | 24 | II | — |
| 5 | 1 | GN | 19 | I | — | Right Rear Stop/Turn Lamp Control | 5 | 1 | BN/GN | 19 | II | — |
| 6 | 0.75 | BK | 1750 | I | — | Ground | 6 | 0.75 | BK | 1750 | II | — |

# X427 Body Harness to Chassis Harness (UVI)

—

## Connector Part Information

Harness Type: Body
OEM Connector: 13514203
Service Connector: -
Description: 1-Way F

—

## Connector Part Information

Harness Type: Chassis
OEM Connector: 13514206
Service Connector: -
Description: 1-Way M

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X427 Body Harness to Chassis Harness (UVI)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BK | — | — | COAX | I | — | Coax Cable | BK | — | — | COAX | II | — |

# X428 Chassis Harness to Body Harness (UV2/UVI)

| — | — |
|---|---|
| **Connector Part Information**<br>Harness Type: Chassis<br>OEM Connector: 13514208<br>Service Connector: -<br>Description: 1-Way F | **Connector Part Information**<br>Harness Type: Body<br>OEM Connector: 13514205<br>Service Connector: -<br>Description: 1-Way M |

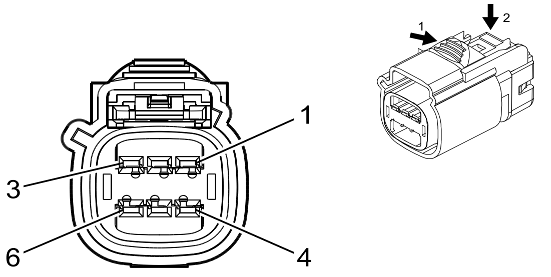
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X428 Chassis Harness to Body Harness (UV2/UVI)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BN | — | — | COAX | I | — | Coax Cable | BN | — | — | COAX | II | — |

# X450 Cargo Accessory Power Receptacle Jumper Harness to Chassis Harness (KC9/KCA)



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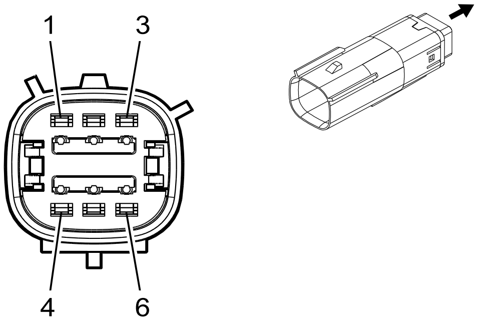


4992963

## Connector Part Information

Harness Type: Cargo Accessory Power Receptacle Jumper
OEM Connector: 15513505
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way F 1.5 OCS Series, Sealed (GY)

## Connector Part Information

Harness Type: Chassis
OEM Connector: 15513475
Service Connector: 19371205
Description: 6-Way M 1.5 OCS Series, Sealed (GY)

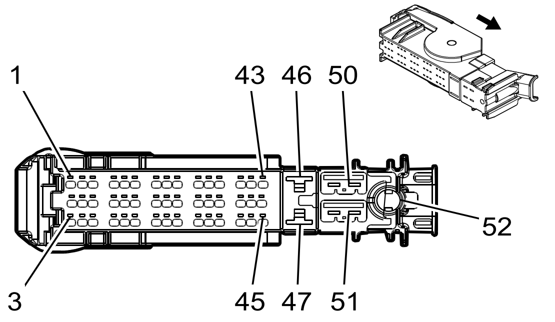
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

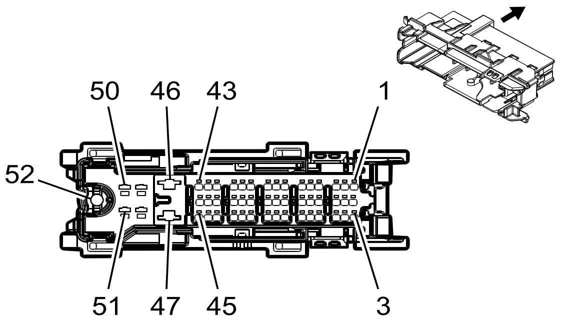
## X450 Cargo Accessory Power Receptacle Jumper Harness to Chassis Harness (KC9/KCA)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BK/WH | 2264 | I | — | 120 VAC Phase A 2 | 1 | 0.75 | BK/WH | 2264 | II | — |
| 2 | 0.75 | RD/WH | 2265 | I | — | 120 VAC Phase B 2 | 2 | 0.75 | RD/WH | 2265 | II | — |
| 3 | 0.5 | GN | 2257 | I | — | Drain Wire | 3 | 0.5 | BN | 2257 | II | — |
| 4 | 0.75 | GN/BN | 2266 | I | — | DC To AC Inverter Control 2 | 4 | 0.75 | GN/BN | 2266 | II | — |
| 5 | 0.5 | BN | 7754 | I | — | AC Power Outlet Enable | 5 | 0.5 | BN | 7754 | II | — |
| 6 | 1 | BK | 6650 | I | — | Ground (66) Propulsion System | 6 | 1 | BK | 6650 | II | — |

# X500 Driver Door Harness to Body Harness



4992530



4993484

## Connector Part Information

Harness Type: Driver Door

OEM Connector: 35077349

Service Connector: Service by Harness - See Part Catalog

Description: 52-Way F 1.2, 2.8, 6.3, Coaxial Series, Sealed (BK)

## Connector Part Information

Harness Type: Body

OEM Connector: 35072682

Service Connector: 13519704

Description: 52-Way M 1.2, 2.8, 6.3, Coaxial Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-42 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| IV | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| V | 13575823 | J-35616-5 (PU) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| VI | 13580023 | J-35616-43 (RD) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| VII | 19352074 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VIII | 19352075 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VIII | 19352075 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## X500 Driver Door Harness to Body Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | — | — | — | — | — | Not Occupied | 1 | — | — | — | — | — |
| 2 | 0.5 | GY/YE | 1760 | I | UKC | Left Side Object Detection LED Control | 2 | 0.35 | GY/YE | 1760 | VII | UKC |
| 3 - 5 | — | — | — | — | — | Not Occupied | 3 - 5 | — | — | — | — | — |

## X500 Driver Door Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 0.5 | YE/ VT | 3397 | I | AXG-A45 | Passenger Mirror Motor Up (+) Down (-) Control | 6 | 0.5 | YE/ VT | 3397 | VII | AXG-A45 |
| 7 | 0.5 | WH | 3398 | I | AXG-A45 | Passenger Mirror Motor Common Control | 7 | 0.5 | WH | 3398 | VII | AXG-A45 |
| 8 | 0.5 | GN/ BK | 3396 | I | AXG-A45 | Passenger Mirror Motor Right (+) Left (-) Control | 8 | 0.5 | GN/ BK | 3396 | VII | AXG-A45 |
| 9 | 0.5 | BU | 2082 | I | DEZ/DLF | Puddle Lamp Control | 9 | 0.35 | BU | 2082 | VII | DEZ/DLF |
| 10 | 0.5 | BK/ BU | 5978 | I | A45 | Memory Switch Low Reference | 10 | 0.35 | BK/ BU | 5978 | VII | A45 |
| 11 | — | — | — | — | — | Not Occupied | 11 | — | — | — | — | — |
| 12 | 0.5 | WH | 615 | I | A45 | Memory Seat Switch Signal 1 | 12 | 0.35 | WH | 615 | VII | A45 |
| 13 | 0.5 | BN/ WH | 781 | I | AU3 | Driver Door Lock Switch Unlock Signal | 13 | 0.35 | BN/ WH | 781 | VII | AU3 |
| 14 | 0.5 | BN/ YE | 2267 | I | DEZ/DLF | Mirror Heating Element Control | 14 | 0.5 | BN/ YE | 2267 | VII | DEZ/DLF |
| 15 | — | — | — | — | — | Not Occupied | 15 | — | — | — | — | — |
| 16 | 0.5 | BU/ GN | 614 | I | A45 | Memory Seat Switch Set Signal | 16 | 0.35 | BU/ GN | 614 | VII | A45 |
| 17 - 18 | — | — | — | — | — | Not Occupied | 17 - 18 | — | — | — | — | — |
| 19 | 0.35 | WH/ YE | 7557 | I | AU3 | LED Ambient Lighting Control 1 | 19 | 0.35 | WH/ YE | 7557 | VII | AU3 |
| 20 | 0.5 | GN/ WH | 3570 | I | BTM | Driver Door Handle Switch Signal | 20 | 0.35 | GN/ WH | 3570 | VII | BTM |
| 21 | 0.5 | WH/ YE | 3574 | I | BTM | Driver Door Open Switch Signal | 21 | 0.35 | WH/ YE | 3574 | VII | BTM |
| 22 | — | — | — | — | — | Not Occupied | 22 | — | — | — | — | — |
| 23 | 0.5 | GY | 745 | I | AEQ | Left Front Door Ajar Switch Signal | 23 | 0.35 | GY | 745 | VII | AEQ |
| 24 | — | — | — | — | — | Not Occupied | 24 | — | — | — | — | — |
| 25 | 0.75 | OG/ GN | 2132 | I | — | Left Front Side Impact Sensing Module Signal | 25 | 0.35 | OG/ GN | 2132 | VII | — |

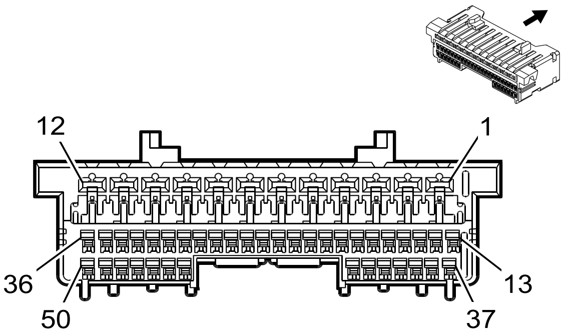
## X500 Driver Door Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 26 | 0.5 | YE/ WH | 1690 | I | DD8/DRZ | Automatic Day/Night Mirror Signal | 26 | 0.35 | YE/ WH | 1690 | VII | DD8/DRZ |
| 27 | 0.5 | GY/ GN | 5996 | I | DEZ | Driver Outside Rear View Mirror Puddle Lamp Control | 27 | 0.35 | GY/ GN | 5996 | VIII | DEZ |
| 28 | 0.75 | BK/ OG | 6628 | I | — | Left Front Side Impact Sensing Module Low Reference | 28 | 0.35 | BK/ OG | 6628 | VII | — |
| 29 | 0.35 | BN/ YE | 780 | I | AU3 | Driver Door Lock Switch Lock Signal | 29 | 0.35 | BN/ YE | 780 | VII | AU3 |
| 30 | 0.5 | RD/ VT | 1940 | I | AXG | Battery Positive Voltage | 30 | 0.35 | RD/ VT | 1940 | VII | AXG |
| 31 | 0.5 | VT/ GY | 3561 | I | BTM | Passive Entry Driver Door Antenna Signal Lo | 31 | 0.5 | VT/ GY | 3561 | VII | BTM |
| 32 | 0.5 | VT | 3560 | I | BTM | Passive Entry Driver Door Antenna Signal Hi | 32 | 0.5 | VT | 3560 | VII | BTM |
| 33 | 0.5 | BU/ VT | 1124 | I | -AXG | Door Lock Key Switch Unlock Signal | 33 | 0.35 | BU/ VT | 1124 | VII | -AXG |
| 34 | — | — | — | — | — | Not Occupied | 34 | — | — | — | — | — |
| 35 | 0.5 | GN/ YE | 6134 | I | AXG | Local Interconnect Network Serial Data Bus 3 | 35 | 0.35 | GN/ YE | 6134 | VII | AXG |
| 36 - 42 | — | — | — | — | — | Not Occupied | 36 - 42 | — | — | — | — | — |
| 43 | 0.5 | YE | 6817 | I | — | LED Backlight Dimming Control | 43 | 0.35 | YE | 6817 | VII | — |
| 44 | 0.5 | GN/ WH | 7530 | I | — | Local Interconnect Network Serial Data Bus 8 | 44 | 0.35 | GN/ WH | 7530 | VIII | — |
| 45 | 0.5 | BK/ YE | 1691 | I | DD8/DRZ | Automatic Day/Night Mirror Low Reference | 45 | 0.35 | BK/ YE | 1691 | VII | DD8/DRZ |
| 46 | 3 | BK | 1150 | II | — | Ground | 46 | — | — | — | — | — |
| 47 | 2.5 | RD/ BU | 1842 | II | AXG | Battery Positive Voltage | 47 | 2.5 | RD/ BU | 1842 | VI | AXG |
| 48 | 0.75 | BN/ YE | 294 | III | — | Door Lock Actuator Unlock Control | 48 | 0.75 | BN/ YE | 294 | V | — |
| 49 | 0.75 | GY | 5911 | III | — | Door Lock Actuator Lock Control 2 | 49 | 0.75 | GY | 5911 | V | — |

## X500 Driver Door Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 | 0.75 | BN/BU | 118 | III | — | Left Front Speaker Signal (-) 1 | 50 | 0.75 | BN/BU | 118 | V | — |
| 51 | 0.75 | BU | 201 | III | — | Left Front Speaker Control (+) 1 | 51 | 0.75 | BU | 201 | V | — |
| 52 | — | COAX | 2628 | IV | UVI/UV2 | Left Side Vision Camera Video Signal (+) | 52 | — | COAX | 2628 | VIII | UVI/UV2 |

## X505 Driver Door Harness to Driver Door Trim Harness



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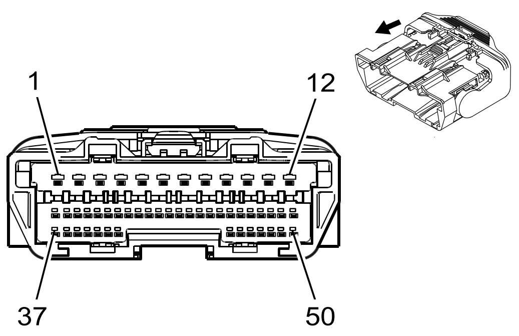


5022037

### Connector Part Information

Harness Type: Driver Door
OEM Connector: 33390107
Service Connector: Service by Harness - See Part Catalog
Description: 50-Way F 1.2, 2.8 OCS Series (BK)

### Connector Part Information

Harness Type: Driver Door Trim
OEM Connector: 33390111
Service Connector: Service by Harness - See Part Catalog
Description: 50-Way M 1.2, 2.8 OCS Series (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

### X505 Driver Door Harness to Driver Door Trim Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - 12 | — | — | — | — | — | Not Occupied | 1 - 12 | — | — | — | — | — |
| 13 | 0.5 | GN/WH | 7530 | I | — | Local Interconnect Network Serial Data Bus 8 | 13 | 0.5 | GN/WH | 7530 | II | — |
| 14 | 0.35 | BK/BN | 3393 | I | A45 | Driver Mirror Position Sensor Low Reference | 14 | 0.35 | BK/BN | 3393 | II | — |
| 15 | 0.5<br>0.35 | BU/VT<br>BU/VT | 1124<br>1124 | I<br>I | AXG<br>-AXG | Door Lock Key Switch Unlock Signal<br>Door Lock Key Switch Unlock Signal | 15 | 0.35 | BU/VT | 1124 | II | — |
| 16 | 0.35 | GN/WH | 3379 | I | — | Power Window Switch Driver Up Signal | 16 | 0.5 | GN/WH | 3379 | II | — |
| 17 | 0.5 | RD/VT | 1940 | I | — | Battery Positive Voltage | 17 | 0.5 | RD/VT | 1940 | II | — |

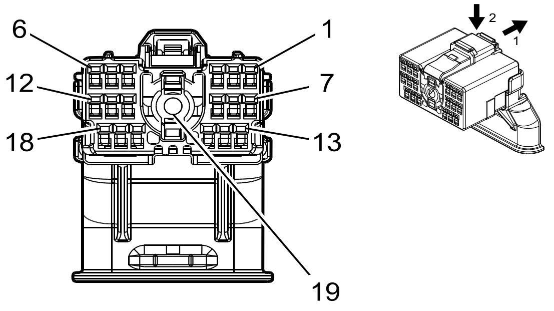
## X505 Driver Door Harness to Driver Door Trim Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18 | 0.35 | GN | 3381 | I | — | Power Window Switch Driver Express Signal | 18 | 0.35 | GN | 3381 | II | — |
| 19 | 0.5 | WH | 3398 | I | — | Passenger Mirror Motor Common Control | 19 | 0.5 | WH | 3398 | II | — |
| 20 | 0.35 | WH/ YE | 7557 | I | — | LED Ambient Lighting Control 1 | 20 | 0.35 | WH/ YE | 7557 | II | — |
| 21 | 0.5 | BN/ BK | 3389 | I | — | Driver Mirror Motor Right (+) Left (-) Control | 21 | 0.35 | BN/ BK | 3389 | II | — |
| 22 | 0.5 | WH/ YE | 3395 | I | A45 | Driver Mirror Position Sensor Left (-) Right (+) Signal | 22 | 0.35 | WH/ YE | 3395 | II | — |
| 23 | — | — | — | — | — | Not Occupied | 23 | — | — | — | — | — |
| 24 | 0.35 | WH/ GN | 3412 | I | — | Driver Mirror Motor Fold In Control | 24 | 0.35 | WH/ GN | 3412 | II | — |
| 25 | 0.35 | WH/ VT | 3270 | I | — | Driver Door Lock Motor Status Signal | 25 | 0.35 | WH/ VT | 3270 | II | — |
| 26 | 0.35 | GY/ BN | 3394 | I | — | Driver Mirror Position Sensor Up (+) Down (-) Signal | 26 | 0.35 | GY/ BN | 3394 | II | — |
| 27 | 0.5 | GN/ YE | 6134 | I | — | Local Interconnect Network Serial Data Bus 3 | 27 | 0.5 | GN/ YE | 6134 | II | — |
| 28 | 0.35 | YE/ BN | 3391 | I | — | Driver Mirror Motor Common Control | 28 | 0.35 | YE/ BN | 3391 | II | — |
| 29 | — | — | — | — | — | Not Occupied | 29 | — | — | — | — | — |
| 30 | 0.75 | BK | 1150 | I | — | Ground | 30 | 0.5 | BK | 1150 | II | — |
| 31 | 0.35 | GY/ WH | 3411 | I | — | Driver Mirror Motor Fold Out Control | 31 | 0.35 | GY/ WH | 3411 | II | — |
| 32 | — | — | — | — | — | Not Occupied | 32 | — | — | — | — | — |
| 33 | 0.35 | VT/ BU | 3390 | I | — | Driver Mirror Motor Up (+) Down (-) Control | 33 | 0.35 | VT/ BU | 3390 | II | — |
| 34 | 0.5 | WH | 615 | I | — | Memory Seat Switch Signal 1 | 34 | 0.35 | WH | 615 | II | — |
| 35 | — | — | — | — | — | Not Occupied | 35 | — | — | — | — | — |
| 36 | 0.5 | YE | 6817 | I | — | LED Backlight Dimming Control | 36 | 0.5<br>0.35 | YE<br>YE | 6817<br>6817 | II | AU3<br>A45 |

## X505 Driver Door Harness to Driver Door Trim Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 | — | — | — | — | — | Not Occupied | 37 | — | — | — | — | — |
| 38 | 0.35 | VT/RD | 3392 | I | — | Driver Mirror Position Sensor 5V Reference | 38 | 0.5 | VT/RD | 3392 | II | — |
| 39 | 0.5 | BN/WH | 781 | I | — | Driver Door Lock Switch Unlock Signal | 39 | 0.35 | BN/WH | 781 | II | — |
| 40 | 0.5 | GN/BK | 3396 | I | — | Passenger Mirror Motor Right (+) Left (-) Control | 40 | 0.35 | GN/BK | 3396 | II | — |
| 41 | 0.5 | YE/VT | 3397 | I | — | Passenger Mirror Motor Up (+) Down (-) Control | 41 | 0.35 | YE/VT | 3397 | II | — |
| 42 | 0.5 | GY | 3380 | I | — | Power Window Switch Driver Down Signal | 42 | 0.5 | GY | 3380 | II | — |
| 43 | 0.5 | BU/GN | 614 | I | — | Memory Seat Switch Set Signal | 43 | 0.35 | BU/GN | 614 | II | — |
| 44 | — | — | — | — | — | Not Occupied | 44 | — | — | — | — | — |
| 45 | 0.5 | BK/BU | 5978 | I | — | Memory Switch Low Reference | 45 | 0.35 | BK/BU | 5978 | II | — |
| 46 | — | — | — | — | — | Not Occupied | 46 | — | — | — | — | — |
| 47 | 0.35 | BN/YE | 780 | I | — | Driver Door Lock Switch Lock Signal | 47 | 0.5 | BN/YE | 780 | II | — |
| 48 - 50 | — | — | — | — | — | Not Occupied | 48 - 50 | — | — | — | — | — |

# X510 Driver Door Harness to Outside Rearview Mirror - Driver Harness



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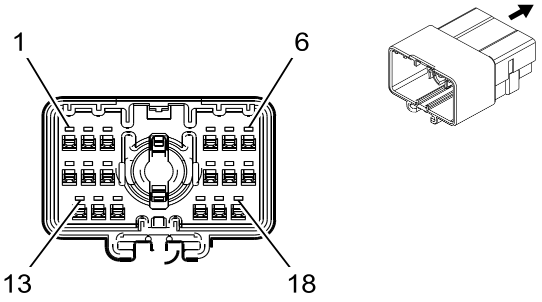


4969165

## Connector Part Information

Harness Type: Driver Door
OEM Connector: 35077331
Service Connector: Service by Harness - See Part Catalog
Description: 19-Way F 1.2 MCON, Coax Series, Sealed (BK)

## Connector Part Information

Harness Type: Outside Rearview Mirror - Driver
OEM Connector: 13518416
Service Connector: Service by Harness - See Part Catalog
Description: 19-Way M 1.2 MCON, Coax Series, Sealed

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

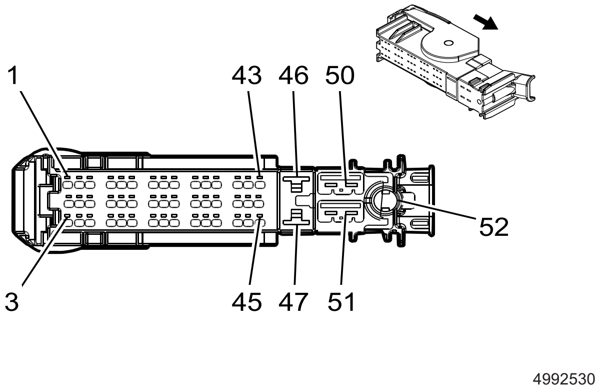
## X510 Driver Door Harness to Outside Rearview Mirror - Driver Harness

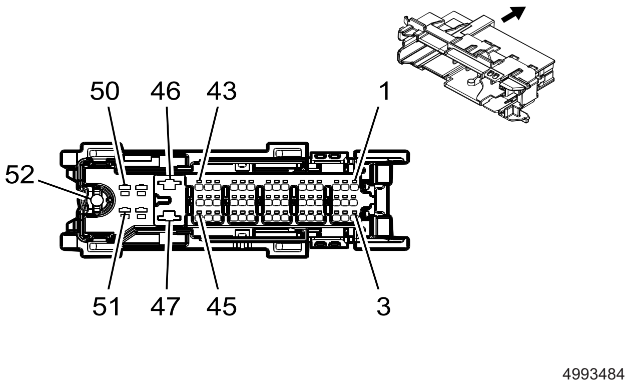
| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | BN/BK | 3389 | I | — | Driver Mirror Motor Right (+) Left (-) Control | 1 | 0.5 | BN/BK | 3389 | III | — |
| 2 | 0.35 | VT/BU | 3390 | I | — | Driver Mirror Motor Up (+) Down (-) Control | 2 | 0.35 | VT/BU | 3390 | III | — |
| 3 | 0.35 | WH/GN | 3412 | I | — | Driver Mirror Motor Fold In Control | 3 | 0.35 | WH/GN | 3412 | III | — |
| 4 | 0.5 | GY/YE | 1760 | I | — | Left Side Object Detection LED Control | 4 | 0.5 | GY/YE | 1760 | III | — |
| 5 | 0.5 | GY/GN | 5996 | I | — | Driver Outside Rear View Mirror Puddle Lamp Control | 5 | 0.5 | GY/GN | 5996 | III | — |

## X510 Driver Door Harness to Outside Rearview Mirror - Driver Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 0.5 | WH/YE | 3395 | I | — | Driver Mirror Position Sensor Left (-) Right (+) Signal | 6 | 0.5 | WH/YE | 3395 | III | — |
| 7 | 0.5 | BN/YE | 2267 | I | — | Mirror Heating Element Control | 7 | 0.5 | BN/YE | 2267 | III | — |
| 8 | — | — | — | — | — | Not Occupied | 8 | — | — | — | — | — |
| 9 | 0.75 | BK | 1150 | I | — | Ground | 9 | 0.75 | BK | 1150 | III | — |
| 10 | 0.35 | VT/RD | 3392 | I | — | Driver Mirror Position Sensor 5V Reference | 10 | 0.35 | VT/RD | 3392 | III | — |
| 11 | 0.35 | GY/BN | 3394 | I | — | Driver Mirror Position Sensor Up (+) Down (-) Signal | 11 | 0.35 | GY/BN | 3394 | III | — |
| 12 | 0.5 | BK/YE | 1691 | I | — | Automatic Day/Night Mirror Low Reference | 12 | 0.5 | BK/YE | 1691 | III | — |
| 13 | 0.5 | BU | 2082 | I | DEZ/DLF | Puddle Lamp Control | 13 | 0.5 | OG | 2082 | III | DEZ/DLF |
| 14 | 0.35 | YE/BN | 3391 | I | — | Driver Mirror Motor Common Control | 14 | 0.35 | YE/BN | 3391 | III | — |
| 15 | 0.35 | GY/WH | 3411 | I | — | Driver Mirror Motor Fold Out Control | 15 | 0.35 | VT/YE | 3411 | III | — |
| 16 | — | — | — | — | — | Not Occupied | 16 | — | — | — | — | — |
| 17 | 0.5 | YE/WH | 1690 | I | — | Automatic Day/Night Mirror Signal | 17 | 0.5 | YE/WH | 1690 | III | — |
| 18 | 0.5 | BK/BN | 3393 | I | — | Driver Mirror Position Sensor Low Reference | 18 | 0.5 | BK/BN | 3393 | III | — |
| 19 | — | COAX | 2628 | II | UVI/UV2 | Left Side Vision Camera Video Signal (+) | 19 | — | COAX | 2628 | III | UVI/UV2 |

# X600 Passenger Door Harness to Body Harness





## Connector Part Information

Harness Type: Passenger Door

OEM Connector: 35077349

Service Connector: Service by Harness - See Part Catalog

Description: 52-Way F 1.2, 2.8, 6.3, Coaxial Series, Sealed (BK)

## Connector Part Information

Harness Type: Body

OEM Connector: 35072682

Service Connector: 13519704

Description: 52-Way M 1.2, 2.8, 6.3, Coaxial Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-42 (RD) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| IV | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| V | 13575823 | J-35616-5 (PU) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| VI | 13580023 | J-35616-43 (RD) | J-38125-11A | Not Available | Not Available | Not Available | Not Available |
| VII | 19352074 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VII | 19352074 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| VIII | 19368518 | J-35616-43 (RD) | J-38125-11A | 7114-4122-02 | Yazaki 9 | A | B |

## X600 Passenger Door Harness to Body Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - 4 | — | — | — | — | — | Not Occupied | 1 - 4 | — | — | — | — | — |
| 5 | 0.5 | GY | 746 | I | AER | Right Front Door Ajar Switch Signal | 5 | 0.35 | GY | 746 | VII | AER |

## X600 Passenger Door Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 0.5 | YE/ VT | 3397 | I | AXG-A45 | Passenger Mirror Motor Up (+) Down (-) Control | 6 | 0.5 | YE/ VT | 3397 | VII | AXG-A45 |
| 7 | 0.5 | WH | 3398 | I | AXG-A45 | Passenger Mirror Motor Common Control | 7 | 0.5 | WH | 3398 | VII | AXG-A45 |
| 8 | 0.5 | GN/ BK | 3396 | I | AXG-A45 | Passenger Mirror Motor Right (+) Left (-) Control | 8 | 0.5 | GN/ BK | 3396 | VII | AXG-A45 |
| 9 | 0.5 | BU | 2082 | I | DEZ/DLF | Puddle Lamp Control | 9 | 0.35 | BU | 2082 | VII | DEZ/DLF |
| 10 - 12 | — | — | — | — | — | Not Occupied | 10 - 12 | — | — | — | — | — |
| 13 | 0.5 | BN/ VT | 245 | I | AU3 | Passenger Door Lock Switch Unlock Control | 13 | 0.35 | BN/ VT | 245 | VII | AU3 |
| 14 - 18 | — | — | — | — | — | Not Occupied | 14 - 18 | — | — | — | — | — |
| 19 | 0.35 | WH/ YE | 7557 | I | AU3 | LED Ambient Lighting Control 1 | 19 | 0.35 | WH/ YE | 7557 | VII | AU3 |
| 20 | 0.5 | VT/ WH | 3571 | I | — | Passenger Door Handle Switch Signal | 20 | 0.35 | VT/ WH | 3571 | VII | — |
| 21 | 0.5 | GY | 1761 | I | UKC | Right Side Object Detection LED Control | 21 | 0.35 | GY | 1761 | VII | UKC |
| 22 - 23 | — | — | — | — | — | Not Occupied | 22 - 23 | — | — | — | — | — |
| 24 | 0.35 | BK | 1250 | I | AU3 | Ground | 24 | 0.5 | BK | 1250 | VII | AU3 |
| 25 | 0.75 | BN/ OG | 2134 | I | — | Right Front Side Impact Sensing Module Signal | 25 | 0.35 | BN/ OG | 2134 | VII | — |
| 26 | — | — | — | — | — | Not Occupied | 26 | — | — | — | — | — |
| 27 | 0.5 | GY/ GN | 5996 | I | DEZ | Driver Outside Rear View Mirror Puddle Lamp Control | 27 | 0.35 | GY/ GN | 5996 | VII | DEZ |
| 28 | 0.75 | BK/ OG | 6629 | I | — | Right Front Side Impact Sensing Module Low Reference | 28 | 0.35 | BK/ OG | 6629 | VII | — |
| 29 | 0.5 | YE/ VT | 244 | I | AU3 | Passenger Door Lock Switch Lock Control | 29 | 0.35 | YE/ VT | 244 | VII | AU3 |

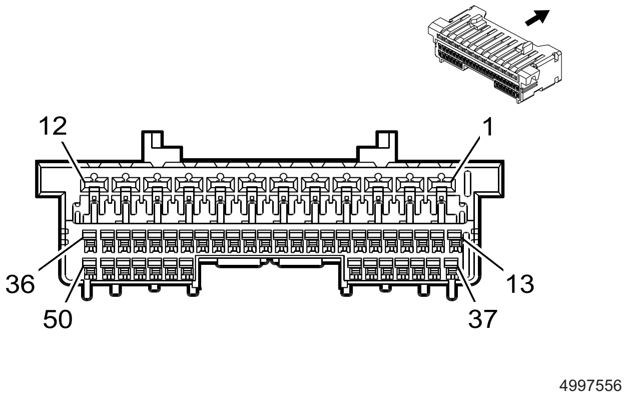
## X600 Passenger Door Harness to Body Harness (cont'd)

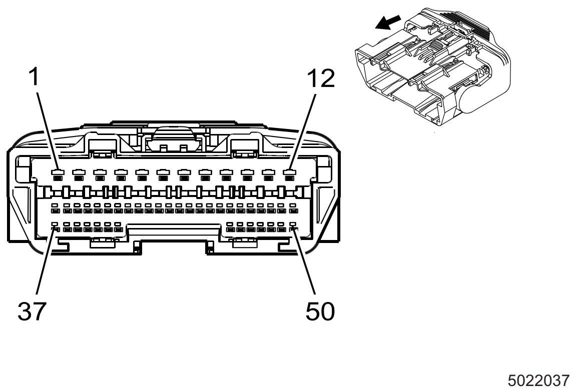
| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 | — | — | — | — | — | Not Occupied | 30 | — | — | — | — | — |
| 31 | 0.5 | GN/ BK | 3563 | I | BTM | Passive Entry Passenger Door Antenna Signal Lo | 31 | 0.5 | GN/ BK | 3563 | VII | BTM |
| 32 | 0.5 | GN/ YE | 3562 | I | BTM | Passive Entry Passenger Door Antenna Signal Hi | 32 | 0.5 | GN/ YE | 3562 | VII | BTM |
| 33 | — | — | — | — | — | Not Occupied | 33 | — | — | — | — | — |
| 34 | 0.35 | BK/ GN | 580 | I | — | Engine Control Sensors Low Reference (2) | 34 | 0.35 | BK/ GN | 580 | VII | — |
| 35 | 0.5 | GN/ YE | 6134 | I | AED/AEF | Local Interconnect Network Serial Data Bus 3 | 35 | 0.35 | GN/ YE | 6134 | VII | AED/AEF |
| 36 | 0.35 | BU/ GY | 636 | I | — | Outside Ambient Air Temperature Sensor Signal | 36 | 0.35 | BU/ GY | 636 | VII | — |
| 37 | — | — | — | — | — | Not Occupied | 37 | — | — | — | — | — |
| 38 | 0.5 | BN/ YE | 2267 | I | DEZ/DLF | Mirror Heating Element Control | 38 | 0.5 | BN/ YE | 2267 | VII | DEZ/DLF |
| 39 - 42 | — | — | — | — | — | Not Occupied | 39 - 42 | — | — | — | — | — |
| 43 | 0.5 | YE | 6817 | I | — | LED Backlight Dimming Control | 43 | 0.35 | YE | 6817 | VII | — |
| 44 | 0.5 | GN/ WH | 7530 | I | A45 | Local Interconnect Network Serial Data Bus 8 | 44 | 0.35 | GN/ WH | 7530 | VII | A45 |
| 45 | — | — | — | — | — | Not Occupied | 45 | — | — | — | — | — |
| 46 | 3 | BK | 1250 | II | — | Ground | 46 | 3 | BK | 1250 | VIII | — |
| 47 | 2.5 | RD/ WH | 1340 | II | AEF/AED | Battery Positive Voltage | 47 | 2.5 | RD/ WH | 1340 | VI | AEF/AED |
| 48 | 0.75 | BN/ YE | 294 | III | — | Door Lock Actuator Unlock Control | 48 | 0.75 | BN/ YE | 294 | V | — |
| 49 | 0.75 | GY | 295 | III | — | Door Lock Actuator Lock Control | 49 | 0.75 | GY | 295 | V | — |
| 50 | 0.75 | YE/ BK | 117 | III | — | Right Front Speaker Signal (-) 1 | 50 | 0.75 | YE/ BK | 117 | V | — |
| 51 | 0.75 | YE | 200 | III | — | Right Front Speaker Control (+) 1 | 51 | 0.75 | YE | 200 | V | — |

## X600 Passenger Door Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 52 | — | COAX | 2627 | IV | UVI/UV2 | Right Side Vision Camera Video Signal (+) | 52 | — | COAX | 2627 | VII | UVI/UV2 |

# X605 Passenger Door Harness to Passenger Door Trim Harness





## Connector Part Information

Harness Type: Passenger Door
OEM Connector: 33390107
Service Connector: Service by Harness - See Part Catalog
Description: 50-Way F 1.2, 2.8 OCS Series (BK)

## Connector Part Information

Harness Type: Passenger Door Trim
OEM Connector: 33390111
Service Connector: Service by Harness - See Part Catalog
Description: 50-Way M 1.2, 2.8 OCS Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-4A (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| IV | Not Required | J-35616-5 (PU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X605 Passenger Door Harness to Passenger Door Trim Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 - 2 | — | — | — | — | — | Not Occupied | 1 - 2 | — | — | — | — | — |
| 3 | 2.5 | RD/WH | 1340 | II | AED/AEF | Battery Positive Voltage | 3 | 2.5 | RD/WH | 1340 | IV | AED/AEF |
| 4 - 6 | — | — | — | — | — | Not Occupied | 4 - 6 | — | — | — | — | — |
| 7 | 2 | GN/GY | 3387 | II | AED | Power Window Motor Passenger Up Control | 7 | 2.5 | GN/GY | 3387 | IV | AED |
| 8 | 2 | YE/BU | 3388 | II | AED | Power Window Motor Passenger Down Control | 8 | 2.5 | YE/BU | 3388 | IV | AED |
| 9 | — | — | — | — | — | Not Occupied | 9 | — | — | — | — | — |
| 10 | 3 | BK | 1250 | II | AEF/AU3 | Ground | 10 | 3 | BK | 1250 | IV | AEF/AU3 |
| 11 - 12 | — | — | — | — | — | Not Occupied | 11 - 12 | — | — | — | — | — |

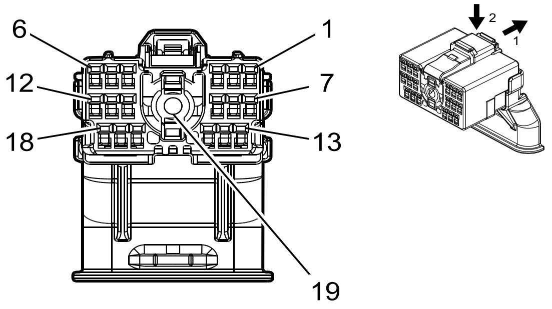
## X605 Passenger Door Harness to Passenger Door Trim Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13 | 0.5 | WH | 3398 | I | A45 | Passenger Mirror Motor Common Control | 13 | 0.5 | WH | 3398 | III | A45 |
| 14 | 0.5 | VT/WH | 3403 | I | A45 | Passenger Mirror Position Sensor Left (-) Right (+) Signal | 14 | 0.35 | VT/WH | 3403 | III | A45 |
| 15 | 0.35 | YE/VT | 3397 | I | A45 | Passenger Mirror Motor Up (+) Down (-) Control | 15 | 0.35 | YE/VT | 3397 | III | A45 |
| 16 | 0.5 | GN/BK | 3396 | I | A45 | Passenger Mirror Motor Right (+) Left (-) Control | 16 | 0.35 | GN/BK | 3396 | III | A45 |
| 17 | 0.5 | YE | 6817 | I | AU3 | LED Backlight Dimming Control | 17 | 0.5<br>0.5 | YE<br>YE | 6817<br>6817 | III | AU3<br>AEF |
| 18 | 0.5 | BK/GN | 3400 | I | A45 | Passenger Mirror Position Sensor Low Reference | 18 | 0.35 | BK/GN | 3400 | III | A45 |
| 19 | 0.5 | GN/WH | 7530 | I | A45 | Local Interconnect Network Serial Data Bus 8 | 19 | 0.35 | GN/WH | 7530 | III | A45 |
| 20 | 0.5 | BN/VT | 245 | I | AU3 | Passenger Door Lock Switch Unlock Control | 20 | 0.35 | BN/VT | 245 | III | AU3 |
| 21 | 0.35 | YE/RD | 3399 | I | A45 | Passenger Mirror Position Sensor 5V Reference | 21 | 0.35 | YE/RD | 3399 | III | A45 |
| 22 | 0.35 | BK | 1250 | I | AU3 | Ground | 22 | 0.35 | BK | 1250 | III | AU3 |
| 23 | 0.5 | YE/VT | 244 | I | AU3 | Passenger Door Lock Switch Lock Control | 23 | 0.35 | YE/VT | 244 | III | AU3 |
| 24 | 0.35 | WH/YE | 7557 | I | AU3 | LED Ambient Lighting Control 1 | 24 | 0.35 | WH/YE | 7557 | III | AU3 |
| 25 | 0.35 | YE/BK | 3384 | I | AEF | Power Window Switch Passenger Up Signal | 25 | 0.5 | YE/BK | 3384 | III | AEF |
| 26 | 0.5 | YE/WH | 3413 | I | A45 | Passenger Mirror Motor Fold Out Control | 26 | 0.5 | YE/WH | 3413 | III | A45 |
| 27 | 0.5 | BU/GY | 3414 | I | A45 | Passenger Mirror Motor Fold In Control | 27 | 0.5 | BU/GY | 3414 | III | A45 |
| 28 | 0.5 | BN/YE | 3385 | I | AEF | Power Window Switch Passenger Down Signal | 28 | 0.5 | BN/YE | 3385 | III | AEF |

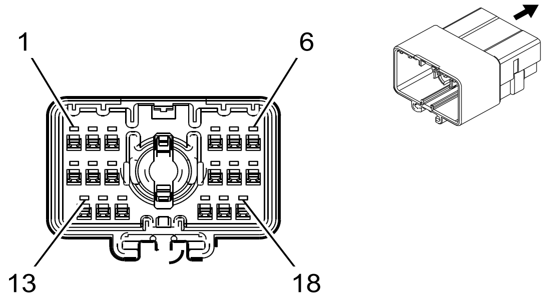
## X605 Passenger Door Harness to Passenger Door Trim Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 | 0.5 | GY | 746 | I | AED | Right Front Door Ajar Switch Signal | 29 | 0.5 | GY | 746 | III | AED |
| 30 | 0.35 | BU/YE | 3401 | I | A45 | Passenger Mirror Position Sensor Up (+) Down (-) Signal | 30 | 0.35 | BU/YE | 3401 | III | A45 |
| 31 - 33 | — | — | — | — | — | Not Occupied | 31 - 33 | — | — | — | — | — |
| 34 | 0.35 | VT/GY | 3386 | I | AEF | Power Window Switch Passenger Express Signal | 34 | 0.35 | VT/GY | 3386 | III | AEF |
| 35 | 0.5 | GN/YE | 6134 | I | AXG | Local Interconnect Network Serial Data Bus 3 | 35 | 0.5 | GN/YE | 6134 | III | AXG |
| 36 - 50 | — | — | — | — | — | Not Occupied | 36 - 50 | — | — | — | — | — |

# X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness



4991775



4969165

## Connector Part Information

Harness Type: Passenger Door

OEM Connector: 35077331

Service Connector: Service by Harness - See Part Catalog

Description: 19-Way F 1.2 MCON, Coaxial Series, Sealed (BK)

## Connector Part Information

Harness Type: Passenger Outside Rearview Mirror

OEM Connector: 13518416

Service Connector: Service by Harness - See Part Catalog

Description: 19-Way M 1.2 MCON, Coax Series, Sealed

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-64B (LT BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |

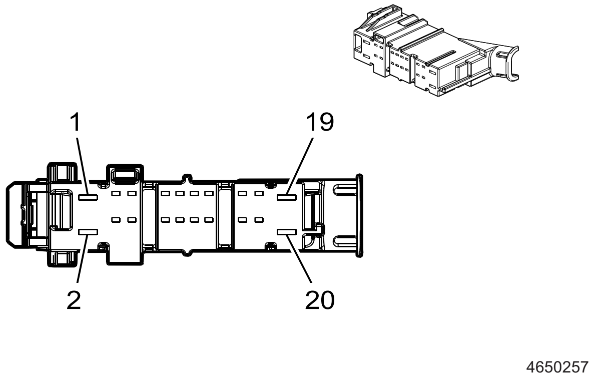
## X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness

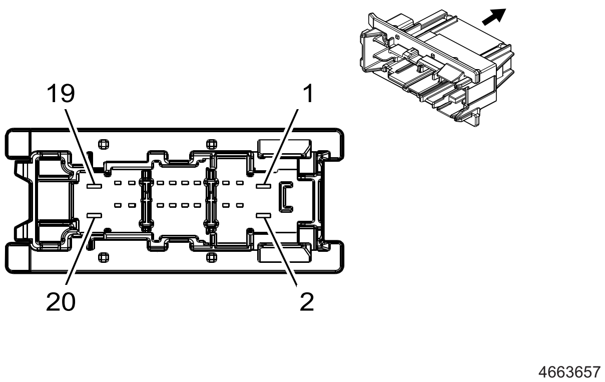
| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/BK | 3396 | I | — | Passenger Mirror Motor Right (+) Left (-) Control | 1 | 0.5 | GN/BK | 3396 | III | — |
| 2 | 0.5 | YE/VT | 3397 | I | — | Passenger Mirror Motor Up (+) Down (-) Control | 2 | 0.5 | YE/VT | 3397 | III | — |
| 3 | 0.5 | BU/GY | 3414 | I | — | Passenger Mirror Motor Fold In Control | 3 | 0.5 | BU/GY | 3414 | III | — |
| 4 | 0.5 | GY | 1761 | I | — | Right Side Object Detection LED Control | 4 | 0.5 | GY | 1761 | III | — |
| 5 | 0.5 | GY/GN | 5996 | I | — | Driver Outside Rear View Mirror Puddle Lamp Control | 5 | 0.5 | GY/GN | 5996 | III | — |

## X610 Passenger Door Harness to Passenger Outside Rearview Mirror Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | 0.5 | VT/WH | 3403 | I | — | Passenger Mirror Position Sensor Left (-) Right (+) Signal | 6 | 0.5 | VT/WH | 3403 | III | — |
| 7 | 0.5 | BN/YE | 2267 | I | — | Mirror Heating Element Control | 7 | 0.5 | BN/YE | 2267 | III | — |
| 8 | — | — | — | — | — | Not Occupied | 8 | — | — | — | — | — |
| 9 | 0.75 | BK | 1250 | I | — | Ground | 9 | 0.75 | BK | 1250 | III | — |
| 10 | 0.35 | YE/RD | 3399 | I | — | Passenger Mirror Position Sensor 5V Reference | 10 | 0.35 | YE/RD | 3399 | III | — |
| 11 | 0.35 | BU/YE | 3401 | I | — | Passenger Mirror Position Sensor Up (+) Down (-) Signal | 11 | 0.35 | BU/YE | 3401 | III | — |
| 12 | 0.35 | BK/GN | 580 | I | — | Engine Control Sensors Low Reference (2) | 12 | 0.35 | BK/GN | 580 | III | — |
| 13 | 0.5 | BU | 2082 | I | — | Puddle Lamp Control | 13 | 0.5 | OG | 2082 | III | — |
| 14 | 0.5 | WH | 3398 | I | — | Passenger Mirror Motor Common Control | 14 | 0.5 | WH | 3398 | III | — |
| 15 | 0.5 | YE/WH | 3413 | I | — | Passenger Mirror Motor Fold Out Control | 15 | 0.5 | YE/WH | 3413 | III | — |
| 16 | — | — | — | — | — | Not Occupied | 16 | — | — | — | — | — |
| 17 | 0.35 | BU/GY | 636 | I | — | Outside Ambient Air Temperature Sensor Signal | 17 | 0.35 | BU/GY | 636 | III | — |
| 18 | 0.5 | BK/GN | 3400 | I | — | Passenger Mirror Position Sensor Low Reference | 18 | 0.5 | BK/GN | 3400 | III | — |
| 19 | — | COA-X | 2627 | II | — | Right Side Vision Camera Video Signal (+) | 19 | — | COA-X | 2627 | III | — |

## X700 Left Rear Door Harness to Body Harness





### Connector Part Information

Harness Type: Left Rear Door
OEM Connector: 33303652
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F 1.2 MCON, 2.8 MCP Series (BK)

### Connector Part Information

Harness Type: Body
OEM Connector: 33303657
Service Connector: 13509580
Description: 20-Way M 1.2 MCON, 2.8 MCP Series (BK)

### Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | 13586064 | J-35616-5 (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | 19352074 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| V | 19352075 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

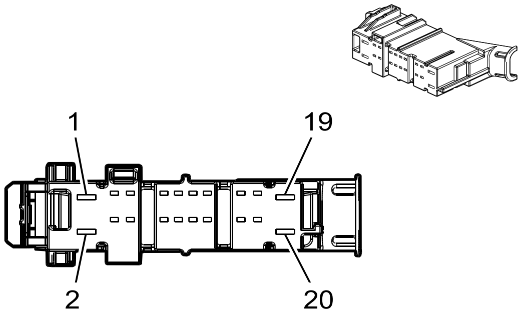
### X700 Left Rear Door Harness to Body Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | RD/BU | 1842 | II | — | Battery Positive Voltage | 1 | 2.5 | RD/BU | 1842 | III | — |
| 2 | — | — | — | — | — | Not Occupied | 2 | — | — | — | — | — |
| 3 | 0.75 | BN/YE | 294 | I | — | Door Lock Actuator Unlock Control | 3 | 0.75 | BN/YE | 294 | V | — |
| 4 - 5 | — | — | — | — | — | Not Occupied | 4 - 5 | — | — | — | — | — |
| 6 | 0.5 | PK | 6157 | I | — | Left Rear Door Handle Switch Signal | 6 | 0.35 | BN/YE | 6157 | IV | — |
| 7 - 8 | — | — | — | — | — | Not Occupied | 7 - 8 | — | — | — | — | — |

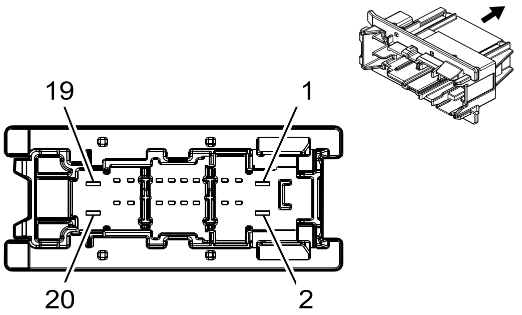
## X700 Left Rear Door Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 0.5 | OG/ BU | 6622 | I | — | Left Rear Side Impact Sensing Module Signal | 9 | 0.35 | OG/ BU | 6622 | IV | — |
| 10 | 0.5 | BK/ OG | 6623 | I | — | Left Rear Side Impact Sensing Module Low Reference | 10 | 0.35 | BK/ OG | 6623 | IV | — |
| 11 | — | — | — | — | — | Not Occupied | 11 | — | — | — | — | — |
| 12 | 0.5 | GN/ GY | 6135 | I | — | Local Interconnect Network Serial Data Bus 4 | 12 | 0.35 | GN/ GY | 6135 | IV | — |
| 13 | 0.5 | GN/ BK | 116 | I | — | Left Rear Speaker Signal (-) | 13 | 0.5 | GN/ BK | 116 | IV | — |
| 14 | 0.5 | GN | 199 | I | — | Left Rear Speaker Control (+) | 14 | 0.5 | GN | 199 | IV | — |
| 15 - 16 | — | — | — | — | — | Not Occupied | 15 - 16 | — | — | — | — | — |
| 17 | 0.75 | GY | 295 | I | — | Door Lock Actuator Lock Control | 17 | 0.75 | GY | 295 | V | — |
| 18 - 19 | — | — | — | — | — | Not Occupied | 18 - 19 | — | — | — | — | — |
| 20 | 2.5 | BK | 1150 | II | — | Ground | 20 | 2.5 | BK | 1150 | III | — |

# X800 Right Rear Door Harness to Body Harness



4650257



4663657

## Connector Part Information

Harness Type: Right Rear Door
OEM Connector: 33303652
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F 1.2 MCON, 2.8 MCP Series (BK)

## Connector Part Information

Harness Type: Body
OEM Connector: 33303657
Service Connector: 13509580
Description: 20-Way M 1.2 MCON, 2.8 MCP Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-35 (VT) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | 13586064 | J-35616-5 (PU) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| IV | 19352074 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |
| V | 19352075 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

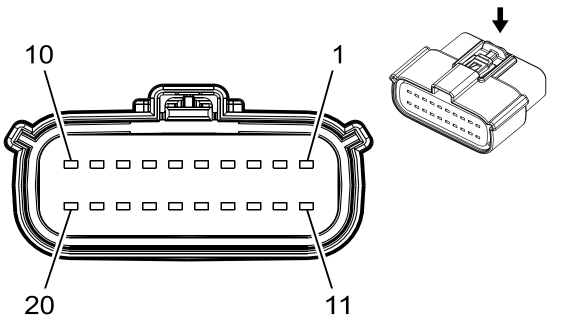
## X800 Right Rear Door Harness to Body Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | RD/WH | 1340 | II | — | Battery Positive Voltage | 1 | 2.5 | RD/WH | 1340 | III | — |
| 2 | — | — | — | — | — | Not Occupied | 2 | — | — | — | — | — |
| 3 | 0.75 | BN/YE | 294 | I | — | Door Lock Actuator Unlock Control | 3 | 0.75 | BN/YE | 294 | V | — |
| 4 - 5 | — | — | — | — | — | Not Occupied | 4 - 5 | — | — | — | — | — |
| 6 | 0.5 | YE/GY | 6158 | I | — | Right Rear Door Handle Switch Signal | 6 | 0.35 | YE/GY | 6158 | IV | — |
| 7 - 8 | — | — | — | — | — | Not Occupied | 7 - 8 | — | — | — | — | — |

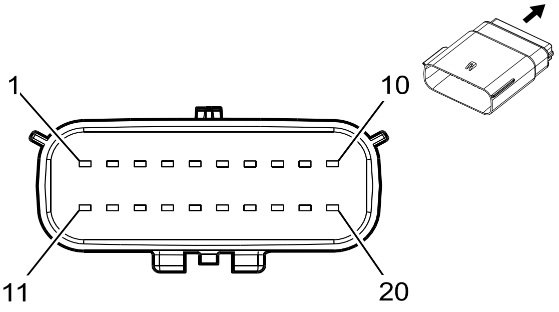
## X800 Right Rear Door Harness to Body Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9 | 0.5 | OG/ VT | 6626 | I | — | Right Rear Side Impact Sensing Module Signal | 9 | 0.35 | OG/ WH | 6626 | IV | — |
| 10 | 0.5 | BK/ OG | 6627 | I | — | Right Rear Side Impact Sensing Module Low Reference | 10 | 0.35 | BK/ OG | 6627 | IV | — |
| 11 | — | — | — | — | — | Not Occupied | 11 | — | — | — | — | — |
| 12 | 0.5 | GN/ GY | 6135 | I | — | Local Interconnect Network Serial Data Bus 4 | 12 | 0.35 | GN/ GY | 6135 | IV | — |
| 13 | 0.5 | BU/ BK | 115 | I | — | Right Rear Speaker Signal (-) | 13 | 0.5 | BU/ BK | 115 | IV | — |
| 14 | 0.5 | WH | 46 | I | — | Right Rear Speaker Control (+) | 14 | 0.5 | WH | 46 | IV | — |
| 15 - 16 | — | — | — | — | — | Not Occupied | 15 - 16 | — | — | — | — | — |
| 17 | 0.75 | GY | 295 | I | — | Door Lock Actuator Lock Control | 17 | 0.75 | GY | 295 | V | — |
| 18 - 19 | — | — | — | — | — | Not Occupied | 18 - 19 | — | — | — | — | — |
| 20 | 2.5 | BK | 1250 | II | — | Ground | 20 | 2.5 | BK | 1250 | III | — |

# X901 Rear Fascia Harness to Chassis Harness



2871898



2871861

## Connector Part Information

Harness Type: Rear Fascia
OEM Connector: 13650143
Service Connector: Service by Harness - See Part Catalog
Description: 20-Way F 1.5 Series, Sealed (BK)

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33181044
Service Connector: 19351705
Description: 20-Way M 1.5 Series, Sealed (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | 19119395 | J-35616-3 (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |
| III | 19119440 | J-35616-3 (GY) | J-38125-217 | Not Available | Not Available | Not Available | Not Available |

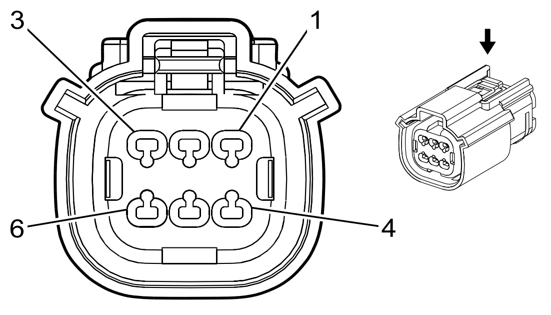
## X901 Rear Fascia Harness to Chassis Harness

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.5 | GN/YE | 6846 | I | — | Rear License Lamp Control | 1 | 0.5 | GN/YE | 6846 | II | — |
| 2 - 3 | — | — | — | — | — | Not Occupied | 2 - 3 | — | — | — | — | — |
| 4 | 0.5 | BK/WH | 1751 | I | — | Signal Ground<br>Signal Ground | 4 | 0.75<br>0.5 | BK/WH<br>BK/WH | 1751<br>1751 | III<br>II | -UKC<br>UKC |
| 5 | — | — | — | — | — | Not Occupied | 5 | — | — | — | — | — |
| 6 | 0.5 | BK | 1450 | I | — | Ground<br>Ground | 6 | 1<br>0.5 | BK<br>BK | 1450<br>1450 | III<br>II | E63<br>ZW9 |
| 7 | 0.35 | GY/YE | 1760 | I | — | Left Side Object Detection LED Control | 7 | 0.5 | GY/YE | 1760 | II | — |
| 8 | 0.35 | GY | 1761 | I | — | Right Side Object Detection LED Control | 8 | 0.5 | GY | 1761 | II | — |
| 9 | 0.5 | BN/WH | 2374 | I | — | Object Sensor Control | 9 | 0.5 | BN/WH | 2374 | II | — |

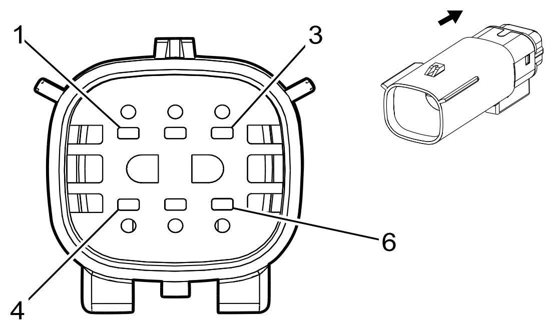
## X901 Rear Fascia Harness to Chassis Harness (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 0.5 | YE | 2375 | I | — | Left Rear Corner Object Sensor Signal | 10 | 0.5 | YE | 2375 | II | — |
| 11 | 0.5 | YE/BU | 2376 | I | — | Left Rear Middle Object Sensor Signal | 11 | 0.5 | YE/BU | 2376 | II | — |
| 12 | 0.5 | YE/WH | 2377 | I | — | Right Rear Middle Object Sensor Signal | 12 | 0.5 | YE/WH | 2377 | II | — |
| 13 | — | — | — | — | — | Not Occupied | 13 | — | — | — | — | — |
| 14 | 0.5 | RD/GN | 1840 | I | — | Battery Positive Voltage | 14 | 0.5 | RD/GN | 1840 | II | — |
| 15 | 0.5 | YE/VT | 2378 | I | — | Right Rear Corner Object Sensor Signal | 15 | 0.5 | YE/VT | 2378 | II | — |
| 16 | 0.5 | BK/GY | 2379 | I | — | Object Sensor Low Reference | 16 | 0.5 | BK/GY | 2379 | II | — |
| 17 | — | — | — | — | — | Not Occupied | 17 | — | — | — | — | — |
| 18 | 0.5 | GN | 5060 | I | — | Low Speed GMLAN Serial Data | 18 | 0.5 | GN | 5060 | II | — |
| 19 - 20 | — | — | — | — | — | Not Occupied | 19 - 20 | — | — | — | — | — |

# X904 Chassis Harness to Rear Chassis Extension Harness (Z45)



1986157



1986159

## Connector Part Information

Harness Type: Chassis
OEM Connector: 13609714
Service Connector: 13585853
Description: 6-Way F 150 MX Series, Sealed (BK)

## Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 33482-3601
Service Connector: Service by Harness - See Part Catalog
Description: 6-Way M 150 MX Series, Sealed (BK)

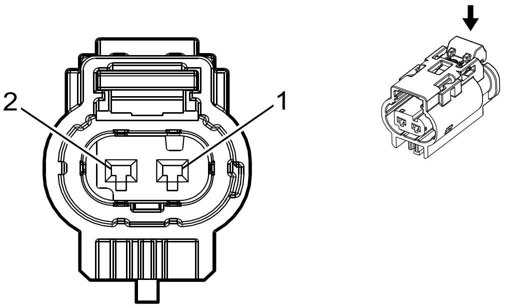
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-2A (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-3 (GY) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X904 Chassis Harness to Rear Chassis Extension Harness (Z45)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | BU/GY | 1114 | I | — | Left Rear Damping Servo Control | 1 | 0.75 | BU/WH | 1114 | II | — |
| 2 | 0.5 | GN/YE | 1616 | I | — | Brake Lining Wear Sensor Signal Rear | 2 | 0.75 | GN | 1616 | II | — |
| 3 | 0.75 | BN/GN | 1118 | I | — | Right Rear Damping Servo Control | 3 | 0.75 | BU/WH | 1118 | II | — |
| 4 | 0.75 | GN/VT | 1115 | I | — | Left Rear Damping Servo Control | 4 | 0.75 | GN | 1115 | II | — |
| 5 | 0.5 | BK/WH | 1751 | I | — | Signal Ground | 5 | 0.75 | BK/WH | 1751 | II | — |
| 6 | 0.75 | GN/GY | 1119 | I | — | Right Rear Damping Servo Control | 6 | 0.75 | BU/WH | 1119 | II | — |

# X904 Rear Chassis Extension Harness to Chassis Harness (-Z45)



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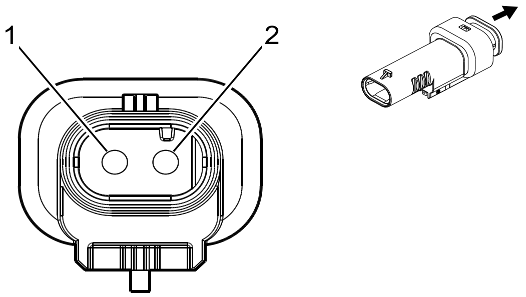


4992757

## Connector Part Information

Harness Type: Rear Chassis Extension
OEM Connector: 13583199
Service Connector: Service by Harness - See Part Catalog
Description: 2-Way F 1.2 Multilock Series, Sealed (GY)

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33356666
Service Connector: 19371200
Description: 2-Way M 1.2 MLK Series, Sealed (GY)

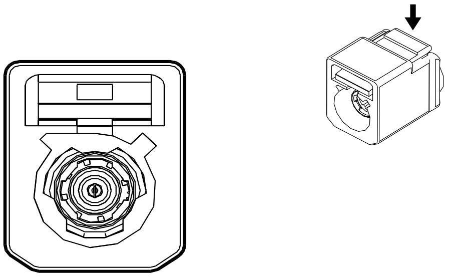
## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-17 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |

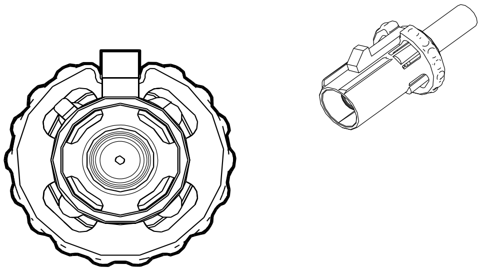
## X904 Rear Chassis Extension Harness to Chassis Harness (-Z45)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 0.75 | GN | 1616 | I | — | Brake Lining Wear Sensor Signal Rear | 1 | 0.5 | GN/YE | 1616 | II | — |
| 2 | 0.75 | BK/WH | 1751 | I | — | Signal Ground | 2 | 0.5 | BK/WH | 1751 | II | — |

# X909 Endgate Harness to Chassis Harness (UVB)



3293633



4109605

## Connector Part Information

Harness Type: Endgate

OEM Connector: 13514203

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way F Coax Type (BK)

## Connector Part Information

Harness Type: Chassis

OEM Connector: 13514206

Service Connector: Service by Cable Assembly — See Part Catalog

Description: 1-Way M Coax Type (BK)

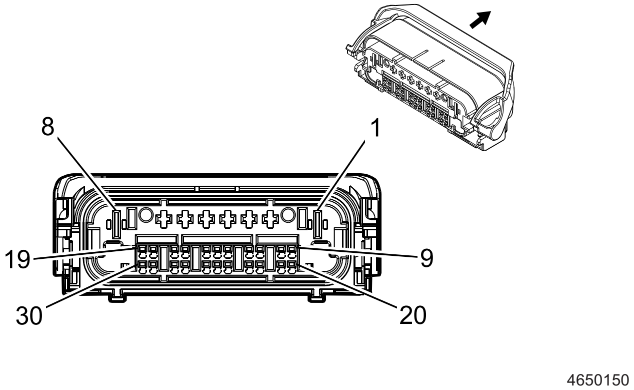
## Terminal Part Information

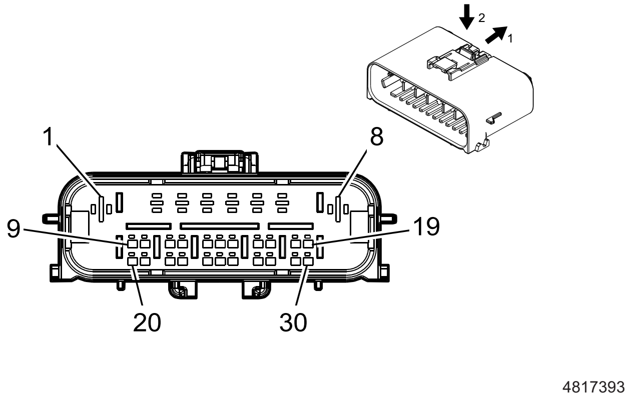
| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X909 Endgate Harness to Chassis Harness (UVB)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| — | — | Coax | — | I | — | Coaxial Camera Signal | — | — | Coax | — | I | — |

# X926 Endgate Harness to Chassis Harness (QK2/QT5)





## Connector Part Information

Harness Type: Endgate
OEM Connector: 33378383
Service Connector: Service by Harness - See Part Catalog
Description: 30-Way F 1.2 MCON, 2.8, 6.3 MCP Series (BK)

## Connector Part Information

Harness Type: Chassis
OEM Connector: 33363373
Service Connector: 19371177
Description: 30-Way M 1.2 MCON, 2.8, 6.3 MCP Series (BK)

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | J-35616-16 (LT GN) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | J-35616-40 (BU) | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| III | 13575376 | J-35616-43 (RD) | J-38125-557 | Not Available | Not Available | Not Available | Not Available |
| IV | 19330704 | J-35616-17 (LT GN) | J-38125-215A | Not Available | Not Available | Not Available | Not Available |

## X926 Endgate Harness to Chassis Harness (QK2/QT5)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2.5 | RD/GY | 7040 | II | QT6 | Battery Positive Voltage | 1 | 2.5 | RD/GY | 7040 | III | QT6 |
| 2 - 7 | — | — | — | — | — | Not Occupied | 2 - 7 | — | — | — | — | — |
| 8 | 2.5 | BK | 1450 | II | QT5/QT6 | Ground | 8 | 4 | BK | 1450 | III | QT5/QT6 |
| 9 | 0.5 | BK/WH | 1751 | I | UVC | Signal Ground | 9 | 0.5 | BK/WH | 1751 | IV | UVC |
| 10 | 0.5 | YE/BU | 7295 | I | QK2 | Left Minor Endgate Ajar Signal | 10 | 0.5 | YE/BU | 7295 | IV | QK2 |
| 11 | 0.35 | WH/BN | 7296 | I | QK2 | Right Minor Endgate Ajar Signal | 11 | 0.5 | WH/BN | 7296 | IV | QK2 |
| 12 | 0.35 | BU | 6974 | I | UVC | Camera Low Reference | 12 | 0.5 | BU | 6974 | IV | UVC |
| 13 | 0.5 | GY | 1198 | I | QT6 | Endgate Release Switch Analog Signal Interior | 13 | 0.5 | GY | 1198 | IV | QT6 |

## X926 Endgate Harness to Chassis Harness (QK2/QT5) (cont'd)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 14 | 0.5 | WH/BU | 6973 | I | UVC | Camera Signal 2 | 14 | 0.5 | WH/BU | 6973 | IV | UVC |
| 15 | — | — | — | — | — | Not Occupied | 15 | — | — | — | — | — |
| 16 | 0.5 | VT | 7725 | I | QK2 | Minor Endgate Motor Supply Voltage | 16 | 0.5 | VT | 7725 | IV | QK2 |
| 17 | 0.5 | YE/BK | 7730 | I | QT5 | Major Endgate Motor Return | 17 | 0.5 | YE/BK | 7730 | IV | QT5 |
| 18 | 0.5 | BN/BK | 7726 | I | QK2 | Minor Endgate Motor Return | 18 | 0.5 | BN/BK | 7726 | IV | QK2 |
| 19 | — | — | — | — | — | Not Occupied | 19 | — | — | — | — | — |
| 20 | 0.5 | GN | 5060 | I | QT6 | Low Speed GMLAN Serial Data | 20 | 0.5 | GN | 5060 | IV | QT6 |
| 21 - 23 | — | — | — | — | — | Not Occupied | 21 - 23 | — | — | — | — | — |
| 24 | 0.5 | VT/GN | 1739 | I | UVC | Run/Crank Ignition 1 Voltage | 24 | 0.5 | VT/GN | 1739 | IV | UVC |
| 25 | 0.5 | WH/VT | 1430 | I | QT5/QT6 | Exterior Courtesy Lamp Control | 25 | — | — | — | — | — |
| 26 | 0.5 | GY/YE | 6972 | I | UVC | Camera Signal 2 + | 26 | 0.5 | GY/YE | 6972 | IV | UVC |
| 27 | 0.5 | GY | 7292 | I | QT5 | Major Endgate Release Switch Signal Exterior | 27 | 0.5 | GY | 7292 | IV | QT5 |
| 28 | 0.35 | YE | 7294 | I | — | Minor Endgate Release Switch Discrete Signal Exterior | 28 | 0.5 | YE | 7294 | IV | — |
| 29 | — | — | — | — | — | Not Occupied | 29 | — | — | — | — | — |
| 30 | 0.5 | GN | 1299 | I | QT5 | Major Endgate Motor Supply Voltage | 30 | 0.5 | GN | 1299 | IV | QT5 |

# X929 Endgate Harness to Chassis Harness (UV2/UVI)

—

## Connector Part Information

Harness Type: Endgate
OEM Connector: 13514203
Service Connector: Service by Harness - See Part Catalog
Description: 1-Way F

—

## Connector Part Information

Harness Type: Chassis
OEM Connector: 13514206
Service Connector: -
Description: 1-Way M

## Terminal Part Information

| Terminal Type ID | Terminated Lead | Diagnostic Test Probe | Terminal Removal Tool | Service Terminal | Tray Name | Core Crimp | Insulation Crimp |
|---|---|---|---|---|---|---|---|
| I | Not Required | Not Available | No Tool Required | Not Required | Not Required | Not Required | Not Required |
| II | Not Required | No Tool Required | No Tool Required | Not Required | Not Required | Not Required | Not Required |

## X929 Endgate Harness to Chassis Harness (UV2/UVI)

| Pin | Size | Color | Circuit | Terminal Type ID | Option | Function | Pin | Size | Color | Circuit | Terminal Type ID | Option |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BK | — | — | COAX | I | — | Coax Cable | BK | — | — | COAX | II | — |

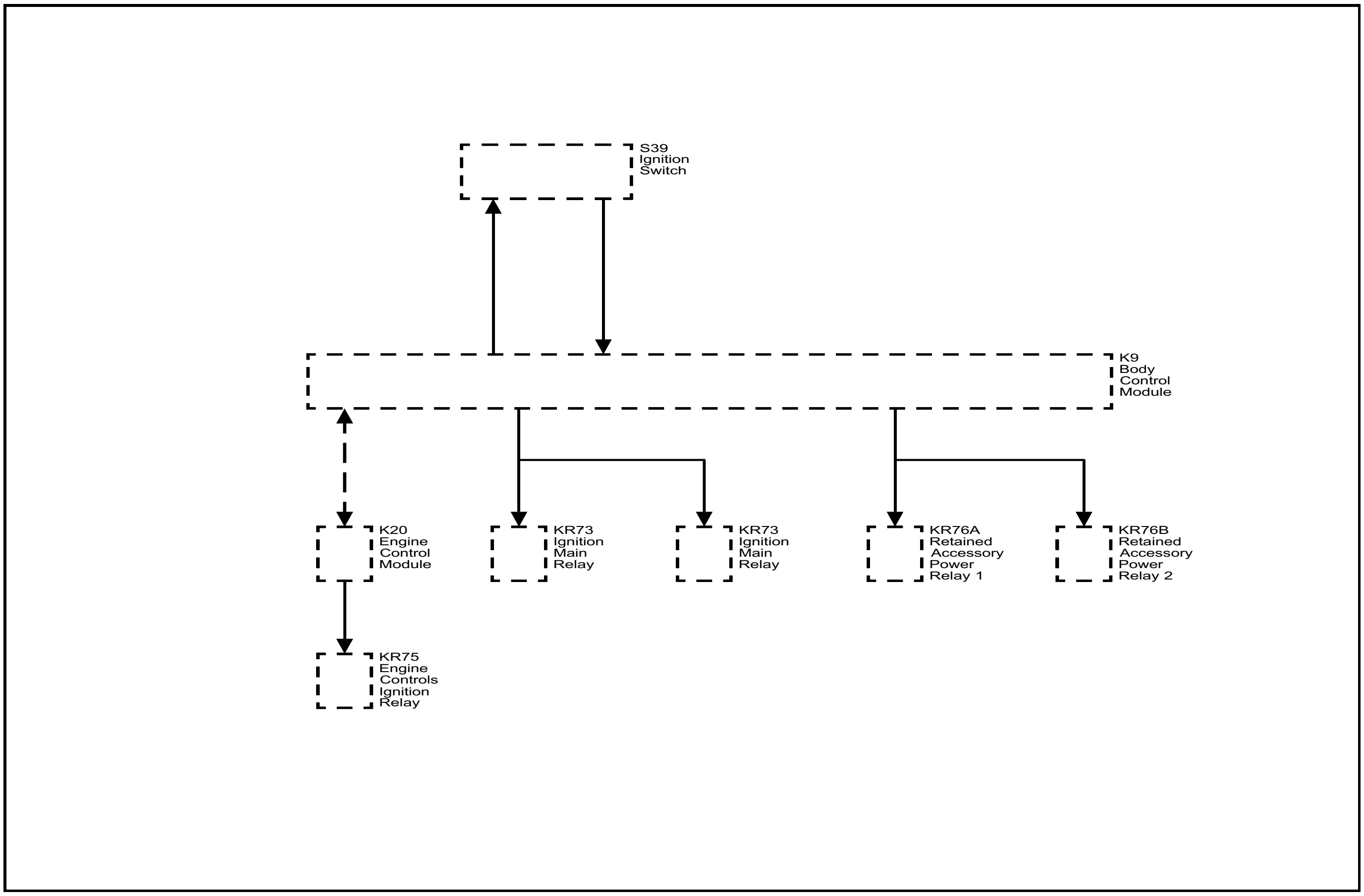
# Wiring Systems and Power Management

## Description and Operation

### Power Mode Description and Operation

#### Serial Data Power Mode Master

**Power Moding Description and Operation Block Diagram**


S39 Ignition Switch
K9 Body Control Module
K20 Engine Control Module
KR73 Ignition Main Relay
KR73 Ignition Main Relay
KR76A Retained Accessory Power Relay 1
KR76B Retained Accessory Power Relay 2
KR75 Engine Controls Ignition Relay

3282831

Power to many of this vehicles circuits is controlled by the module that is designated the power mode master. This vehicles power mode master is the body control module (BCM). The BCM has multiple B+ circuits that feed into it. Each of those circuits are partitioned within the controller to drive certain outputs of the vehicle's body functions. An open or short in any one of the B+ circuits may induce multiple codes/or a section of non-functionality within the BCM with the rest of the BCM functioning normally. In this case it is useful to refer to the power distribution schematics to determine if the non-functional partition of the controller shares a common B+ circuit. The ignition switch is a low current switch with multiple discrete ignition switch signals to the power mode master for determination of the power mode that will be sent over the serial data circuits to the other modules that need this information. The power mode master will also activate relays and other direct outputs of the power mode master as needed. The power mode master determines which power mode (Off, Accessory, Run, Crank Request) is required, and reports this information to other modules via serial data. Modules which have switched voltage inputs may operate in a default mode if the power mode serial data message does not match what the individual module can see from its own connections.

The power mode master receives ignition switch signals to identify the operators desired power mode. The Power Mode Parameter tables below illustrate the correct state of these input parameters (circuits) in correspondence to the ignition switch position:

### Power Mode Parameters

| Ignition Switch Position | Power Mode Transmitted | Ign. Off/Run/Crank (Off/Run Crank Voltage Circuit) | Ignition Accessory/Run (Accessory Voltage Circuit) | Ignition Run/Crank (Ignition 1 Voltage Circuit) |
|---|---|---|---|---|
| Off Key Out | Off | Key Out / ACC | Inactive | Inactive |
| Off Key IN | Off | Key In / Off | Inactive | Inactive |
| Accessory | Accessory | Key Out / ACC | Active | Inactive |
| Run | Run | Run | Active | Active |
| Start | Crank Request | Crank | Inactive | Active |

## Relay Controlled Power Mode

The BCM uses the discrete ignition switch inputs Off/Run/Crank Voltage, Accessory Voltage, and Ignition 1 Voltage, to distinguish the correct power mode. The BCM, after determining the desired power mode, will activate the appropriate relays for that power mode.

The retained accessory power relay 1 and retained accessory power relay 2 remain on for a timed period after the Ignition key is removed. Refer to *Retained Accessory Power Description and Operation on page 6-1040* for more information on the retained accessory power function.

## Battery Saver Mode (Transport Mode)

Battery saver mode (transport mode) reduces the parasitic load of some modules during overseas shipment or during vehicle storage conditions. This improves the drain time on the battery (up to 70 days without the battery going dead). When a vehicle is in transport/storage, some features may have reduced functionality while in the battery saver mode, such as disabling keyless entry, afterblow, and content theft features. Battery saver mode is initiated by turning on the hazard flashers, applying the brake pedal, and then turning the ignition key to the start position or pushing the ignition mode switch with the foot on the brake for greater than 15 seconds. The mode is disengaged by repeating the previous process. The driver information center (if equipped) will display Transport Mode is On when battery saver mode is enabled and Transport Mode is Off when battery saver mode is disabled. For vehicles not equipped with a driver information center, the battery indicator light will constantly flash on the Instrument Cluster when battery saver mode is enabled. This feature can be used as many times as necessary if the vehicle is to be stored for an extended period of time.

## BCM Awake/Sleep States

The BCM is able to control or perform all of the BCM functions in the awake state. The BCM enters the sleep state when active control or normal monitoring of system functions has stopped and a time limit has passed. The BCM must detect certain wake-up inputs before entering the awake state. The BCM monitors for these inputs during the sleep state.

The BCM will enter the awake state if any of the following wake-up inputs are detected:

- Activity on the serial data line
- Detection of a battery reconnect
- Any door open signal
- Headlamps ON
- Key-in-ignition
- Ignition ON
- Park lamps ON
- Keyless entry or remote start message

The BCM will enter a sleep state when all of the following conditions exist:

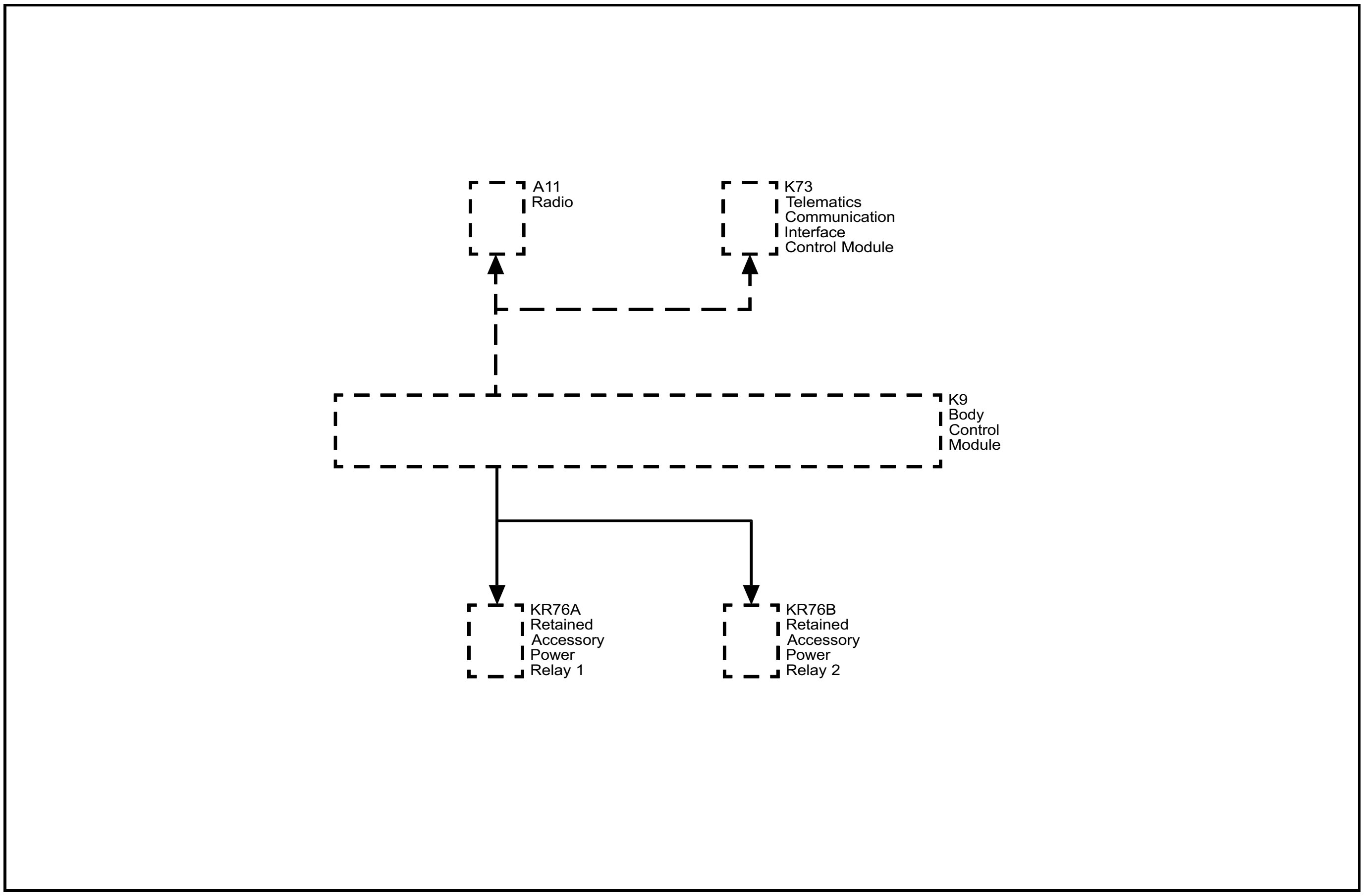
- The ignition switch is OFF, key out.
- Ignition OFF, transmitter is out of range
- No activity exists on the serial data line.
- No outputs are commanded.
- No delay timers are actively counting.
- No wake-up inputs are present.

If all these conditions are met, the BCM will enter a low power or sleep condition.

# Retained Accessory Power Description and Operation

## Retained Accessory Power

### RAP Description and Operation Block Diagram



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The body control module (BCM) monitors the ignition switch position, battery condition, and each door ajar/ open switch status to determine whether the retained accessory power should be initiated or terminated. Retained accessory power is controlled by two different methods; relay control and serial data. Some modules receive a retained accessory power message from the BCM over the serial data circuits. Serial data controlled retained accessory power is deactivated as required by their modules retained accessory power mode operation. Other subsystems are activated directly by the BCM through a relay. Components and systems that are active in retained accessory power are also activated anytime the ignition is any position other than OFF regardless of the door switch signals.

## Relay Controlled Retained Accessory Power

The BCM keeps the retained accessory power relay 1 and retained accessory power relay 2 energized during all power modes, except Off-Awake and Crank. The retained accessory power relay 1 and retained accessory power relay 2 are also energized for approximately 10 minutes after shutting the ignition OFF and removing the key, providing no door is opened.

Relay controlled retained accessory power will end when one of the following conditions is met:

- The BCM receives an input from any door ajar or open switch indicating the opening of any door after the ignition key is out of the ignition.

  **Note:** If the BCM is receiving any door ajar or open signal from those switches when the ignition key is turned OFF, retained accessory power will not initiate.

- The BCM internal timer for the retained accessory power expires after approximately 10 minutes.
- The BCM detects a decrease in battery capacity below a prescribed limit.

Systems powered by the retained accessory power relay 1 and retained accessory power relay 2 during the retained accessory power mode are as follows:

**Note:** The vehicle may not be equipped with all components as listed below.

- Accessory Power Receptacle
- Cigarette Lighter Receptacle
- Sunroof Control Module
- Sunroof Switch

- Sliding Rear Window Switch
- Mobile Device Wireless Charger Module

## Serial Data Controlled Retained Accessory Power

Retained accessory power systems controlled by serial data are as follows:

### Radio

Radio retained accessory power activation / termination is the same as relay operation with one exception; the only door switch that will turn off the radio during retained accessory power is the driver door open switch.

### Vehicle Communication Interface Module (VCIM) (Onstar®) (If Equipped)

VCIM RAP activation/termination is the same as radio operation with 1 exception; if there is an active call when the ignition key is turned off the VCIM will remain in RAP mode, and keep the radio in RAP mode until the call is terminated.

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## Section 7

# Transmission

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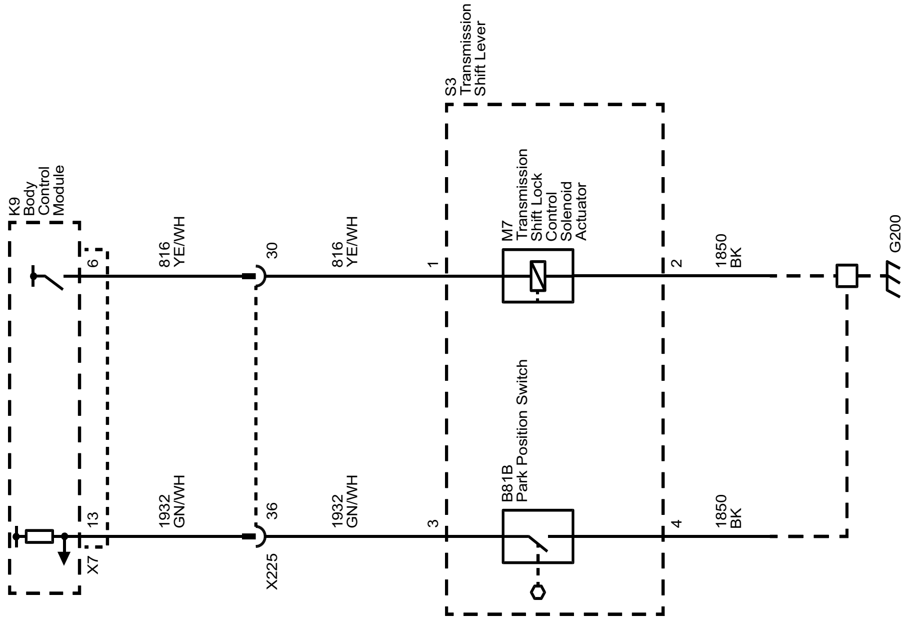
# Shift Lock Control

## Schematic and Routing Diagrams

## Shift Lock Control Schematics (Shift Lock Control)


K9
Body
Control
Module
X7
6
13
816
YE/WH
1932
GN/WH
30
36
X225
816
YE/WH
1932
GN/WH
S3
Transmission
Shift Lever
1
3
M7
Transmission
Shift Lock
Control
Solenoid
Actuator
B81B
Park Position Switch
2
4
1850
BK
1850
BK
G200

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# Description and Operation

## Automatic Transmission Shift Lock Control Description and Operation

The Automatic Transmission Shift Lock Control System is a safety device that prevents an inadvertent shift out of PARK when the engine is running. The driver must press the brake pedal before moving the shift lever out of the PARK position. The system consists of the following components:

- The Automatic Transmission Shift Lock Solenoid (serviced as the Automatic Transmission Shift Lock Actuator)
- The Body Control Module (BCM)
- The Engine Control Module (ECM)

The BCM controls the voltage to the shift lock control solenoid though the shift lock control solenoid controlled voltage circuit. The following conditions must be met before the BCM will supply voltage to the shift lock control solenoid:

- The ignition is in the ON position.
- The ECM sends an input via GMLAN serial data to the BCM when the Transmission Control Module (TCM) indicates the transmission is in the PARK position.
- The BCM receives a brake applied input from the stop lamp switch.

Since the shift lock control solenoid is permanently grounded, the BCM supplies voltage to the automatic transmission shift lock control solenoid, releasing the mechanical lock on the shift lever as the solenoid energizes. The energized solenoid allows the driver to move the shift lever out of the PARK position. When the brake pedal is not applied, the BCM turns the control voltage output of the shift lock control solenoid OFF, de-energizing the shift lock control solenoid. When the transmission is in the PARK position, the de-energized shift lock control solenoid will prevent shifting as the lever is mechanically locked in the PARK position.

During remote start operation the BCM will de-energize the automatic transmission shift lock control circuit, locking the shift lever in the PARK position

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